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JUNE 26, 1943

Railway Age

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On the Missouri Pacific 8.4 per cent of the locomotives in road service make 18 per cent of the mileage . . . .

Four years ago the Missouri Pacific Lines started a program of converting all of the driving axles and other axles on certain of their freight and passenger locomotives to Timken Roller Bearings.

The bearings were applied in the Missouri Pacific Shops.

Recent figures released by the Missouri Pacific show that 18 per cent of their road service locomotive mileage is being made by this fleet of converted steam locomotives, which represent only 8.4 per cent of the total road service locomotives owned.

The locomotives converted to Timken Bearings have made 97.3 per cent more miles than when they were equipped with friction bearings. Furthermore, the use of Timken Bearings has resulted in a great reduction of maintenance work, which means something in wartime.

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PITTSBURGH PENNSYLVANIA

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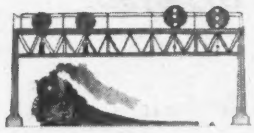
"UNION" CODED TRACK CIRCUIT CONTROL

RECORD OF *PROGRESS*

1933 First installation of three- and four-indication wayside and cab signaling in electrified territory.



1934 First installation of three- and four-indication wayside and cab signaling in steam territory using storage battery track circuits.

First installation in multiple track territory with reverse running on one track.

1938 First 11,000-ft. track circuits using primary or storage batteries.

First application of coded reverse circuit for approach lighting of wayside signals and approach application of cab signal energy.

1939 First installation of three-indication wayside signaling only in steam territory employing the 11,000-ft. track circuits.

First application of tuned alternator as a standby for supply of cab signal energy.

First application as "detector" track circuits in interlockings.

1940 First installation of cab signaling without wayside automatic signals in steam territory.

First application of approach-energized tuned alternators as the sole source of cab signal energy.

First installation in single-track territory with Centralized Traffic Control.

First installation of A.P.B. with three- and four-indication signaling.

First installation using coded detector track circuits and line wire signal controls.

1942 First installation of four- and five-indication signaling in electrified territory.

1943 First installation with three-indication signaling for either direction operation using polar reverse codes.

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UNION SWITCH & SIGNAL COMPANY

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3039

RAILWAY AGE

Employees Seek Average Increases of $4.15 to $6.30 Per Day

It is significant that while the War Labor Board is persisting in its refusal to grant coal miners an increase in wages of $2 or less per day, another government wage tribunal is hearing evidence in New York on a demand of the highest-paid of all railroad employees for an increase in some occupations as much as over $6 a day.

The employees seeking these large increases are the men who operate locomotives and trains—the highest paid of all industrial labor, many having annual incomes in the $4,000 and $5,000 brackets.

The fact that the unions representing these employees are insisting upon such large additions to their generous earnings is not generally recognized, because the peculiar manner of computing wages for train and engine crews permits the statement of large wage payments in language which makes them appear smaller than they are.

Nominally, what the train and engine service unions are asking for is an increase of 30 per cent or $3 per "day," whichever is larger. The catch is in that word "day." To railroad men employed on trains, a "day" usually does not mean 8 hours of work. It is an arbitrary term applied to *miles run*. The following explains what the "day" is, for which train and engine employees seek a minimum $3 increase:

For passenger engineers and firemen, a "day" is either 5 hours worked or 100 miles run, whichever will yield the more.

For passenger conductors and trainmen, a "day" is either 7½ hours worked or 150 miles run, whichever exceeds.

In all other road train and engine service, a "day" is either 8 hours worked or 100 miles run, whichever will yield the more.

As all railroad men know, it is rarely, indeed, that employees operating trains and engines in road service are paid otherwise than by the mile. This means that in an actual *working* day of 5 hours, 7½ hours or 8 hours, these employees can and do make so much mileage that they accumulate two or three or even more *payroll* "days."

January, 1943, Actual Days Worked, and Payroll "Days" Compensation Received, by Road Engine and Train Service Employees

Occupation	Average Actual Days Worked per Full-time Employee	Average Payroll "Days" Paid For per Employee	Actual Daily Average Wage Increase Which a $3 Increase for the Payroll "Day" Would Produce
Passenger Conductors	25.6 (1)	47.8	$5.60
Asst. Passenger Conductors	23.9 (1)	43.9	5.51
Through Freight Conductors	27.7 (2)	46.2	5.00
Local Freight Conductors	34.8 (2)	48.6	4.16
Passenger Baggagemen	24.2 (1)	48.3	5.99
Passenger Brakemen	25.1 (1)	52.7	6.30
Through Freight Brakemen	24.6 (2)	43.4	5.29
Local Freight Brakemen	33.0 (2)	48.4	4.40
Passenger Engineers	33.1 (3)	55.1	4.99
Through Freight Engineers	26.3 (2)	43.2	4.93
Local Freight Engineers	35.0 (2)	48.4	4.15
Passenger Firemen	31.6 (3)	55.4	5.26
Through Freight Firemen	23.8 (2)	41.0	5.17
Local Freight Firemen	33.1 (2)	48.8	4.42

Notes: Day consists of (1) 7½ hours; (2) 8 hours; (3) 5 hours.

The accompanying table gives figures showing the average number of days actually *worked* by each class of train service employees in January, 1943; the average payroll "days" each was *paid for;* and the average wage increase per day actually worked that each would receive if given an increase of $3 for each payroll "day." The *average* increases per day actually worked would range from a minimum of $4.15 for local freight engineers to $6.30 for passenger brakemen, and for many individual employees would greatly exceed $6.30.

Efficiency FOR VICTORY

Business' Objections To Government Rivalry

The magazine "Business Week" in its June 19 issue has a comprehensive article entitled "One-Fifth of a Nation Government-Owned." The discussion has to do with plants financed and owned by the government as a part of the war program, and the question is raised as to what is going to be done with these facilities when the war ends. If these plants are sold to private interests at depreciated prices for peace-time production, the new owners may be able to undersell producers whose facilities have been provided entirely by private financing. On the other hand, if the plants are kept in production under government ownership, the country will have embarked upon a regime of socialism—with private manufacturers paying in full for all their plant plus taxes on their property—thus working under the insuperable handicap of subsidizing the operations of their socialist rivals.

It is a knotty problem, indeed, that these war plants will pose to private industry—no matter what disposition is finally made of them. It is appropriate to observe, however, that the excursion of government investment into manufacturing is certainly no more extensive, nor more troublesome and harmful to private enterprise, than government investment in transportation. Business men and spokesmen for business cannot, with any consistency or righteous regard for principle, decry or lament the spread of socialism in manufacturing while they remain as complacent—and, indeed, approving—as many of them do toward the incursions of socialism into transportation.

We reported in these pages a few weeks ago a speech of a leader of the automotive industry, in which he disclosed that his industry is expecting a post-war boom—to be engendered by heavy government expenditures on the "modernization" of highways, especially in and around the cities. The goal of the road-building industry is set at 3 billion dollars of annual expenditures on highways for a period of five or six years following the war.

The objective of both the highway contractors and the automotive manufacturers appears to be to induce city people who now ride to work in trolley cars and buses to commute by automobile instead. The cost of such commuting in congested city areas—if levied wholly against automobile owners—would be prohibitively large. Hence, the plan appears to be to assess the cost of the new facilities on the taxpayers so that they may be kept attractive to users by costing them nothing.

The railroads were tempted by the National Resources Planning Board to seek to make railroad service artificially cheap to users by a similar expedient—at the taxpayers' expense—but the railroads would have none of it. As far as we have been able to observe, the railroads have thus taken a position unique in American industrial life; that is, they have shown no enthusiasm for socialism even when it promised them immediate benefits; and when it would certainly help them in meeting the competition of rivals who have no scruples at accepting taxpayers' assistance, and who constantly demand more of such help.

This paper commiserates with the plight of manufacturers who find themselves faced, as related by "Business Week," with government-financed competition. Our sympathy would, probably, be deeper if there were more of these afflicted manufacturers who were willing to oppose government competition in transportation, which they deem to be to their advantage, as feelingly as they oppose it when it affects their own interests adversely.

Wheat Movement Begins

After an interval of two years, the wheat rush again presents a transportation problem. The crop this year will be materially smaller than last year's bumper production, but this advantage from a transportation standpoint is more than offset by changed conditions.

To a certain extent in 1941 and much more so in 1942, the railways were subjected to no strain in handling the comparatively small volume of wheat that moved. In 1941 they made their customary preparations in the way of gathering box cars ahead of the harvest and having them in readiness for wheat loading, but it developed that this precaution was unnecessary, for the storage space that was available was soon filled and the movement then practically ceased.

In 1942 no such preparations were necessary, for it was apparent weeks before the harvest that storage space would not be available in the terminal elevators. Therefore, the wheat was held back on the farms and in every variety of local storage facility, and a strict permit system was put into effect to prevent the loading of any cars that could not be unloaded promptly at the terminal elevators. This resulted in spreading the movement of the wheat over several months instead of concentrating it in a few weeks.

This year the situation is entirely different. In addition to the normal movement from the storage elevators to the milling trade, many millions of bushels have been moved in recent weeks for processing into animal feed. There has been a further large movement of wheat to distilleries of late for conversion into the "alkameal" used in the production of industrial alcohol. This has resulted in emptying the terminal elevators to such an extent that ample storage facilities will be available for this year's crop. Thus the burden of handling the wheat rush is again placed on the railways.

This year, however, there is no surplus pool of box cars available to send to the loading territory. It is true that in a four-weeks' period the Car Service division of the A. A. R., in cooperation with the Eastern and Southern lines, did manage to have 15,000 box cars suitable for wheat loading returned to western owners. Under ordinary conditions these would have been held

for the new crop, but this year, with the 1942 crop still moving out of the elevators in large quantities, the car supply dwindled rapidly. As a result, as the harvest began only about 25 per cent of the usual supply of wheat cars was available in the loading territory.

The first two cars of new wheat to reach Kansas City this year brought the highest price in 25 years. This and other factors would ordinarily produce a wheat rush of record proportions. It is hoped to avoid such a strain on transportation, for, otherwise, with the demand for box cars for other purposes, chaos will result. The permit system is again effective, and it is to be hoped that it will be so managed that the rush will be avoided. Wheat is an essential commodity, but selfish considerations cannot be permitted to allow it to create a chaotic condition in transportation at a time when transportation as a whole is even more vital to the Nation's welfare than in normal times.

Hot Boxes Costly

Because of the widely varying conditions under which they occur it is not practical to estimate the cost of a hot box in a freight train. Even under normal traffic conditions, however, it is a very considerable item. Today, with the transportation machine working feverishly at top capacity, the delays to the individual train and a particular car are not only costly, but may seriously hamper important movements, both freight and passenger.

A roundtable discussion in the June "Railway Mechanical Engineer" clearly indicated two important, outstanding facts. In the first place, a large proportion of the hot boxes are caused by neglect of adequate inspection and in following good practice in adjusting and repacking the boxes. To overcome this, the suggestion has been made that uniform practices should be established, which would be followed strictly and generally.

In the second place, supervision has the responsibility for seeing that the workers know exactly how to do their jobs. In other words, more attention must be given to education and in insisting that the rules be followed strictly. A practical car foreman is responsible for the statement that "at least 97 per cent of all heated journals could be eliminated by proper maintenance of equipment by men more adequately educated on journal conditions and contributing causes to journal heating."

The problem, of course, is not made any easier by the manpower shortage. This fact, in itself, however, would seem to demand an intensive, united educational campaign on the part of all of the railroads, as to proper details and methods to be followed. This would add greatly to the utilization of the present equipment. That the problem is not impossible of solution is indicated by the fact that some roads that have given this matter special attention and consideration have made excellent records in the reduction of hot boxes.

Lighting for the Protection of Passengers

Relations between light and safety were discussed in the June 12 issue of *Railway Age*, page 1167. These were based on the best data then available and were concerned primarily with railroad employees. Since those comments were written some excellent quantitative data on this subject have been made available in the form of a paper presented before a meeting of the Illuminating Engineering Society by E. C. Dorting, supervisor of lighting, New York City Transit System.

Mr. Dorting's findings have to do with passenger rather than employee safety and they are rendered especially valuable because the enormous traffic in New York subways (over 5,000,000 daily) permits the rapid accumulation of quantitative information. Two situations were studied. One of these involves stepping over a space between a car door and a subway platform and the other the question of walking down stairs.

The platform studies were made in stations handling up to 100,000 passengers daily. Before the lighting experiments were made, reliance was placed on general illumination, the use of electric warning signs, and "Watch Your Step" audible announcements at the car doors. The device tested was the placing of a light colored strip, consisting of 8-in. square yellow terrazzo tiles at the edge of the platform, and lighting it with 4 to 6 footcandles of illumination, of which about 70 per cent is reflected. Lighting on the surfaces of the platform proper is only about 0.1 footcandle and since it only reflects about 5 per cent of the light, the strip reflects at least 700 times as much light as the platforms. It has reduced accidents 52 per cent.

Good stair lighting produced similar results, but in some of the early tests it effected no reduction at all. It was discovered that if the lighting is to be effective, the stairs must first meet certain specifications. The height of the risers must not vary more than ⅛ in. plus or minus, certain relations must be maintained between height of riser and width of tread (7 in. and 11 in. being given as good values), landings should allow for two average human steps, all treads and landings must be level, all tread nosings should be in line with each other, and there should be a hand rail on each side with one in the center if the total width is more than 132 in.

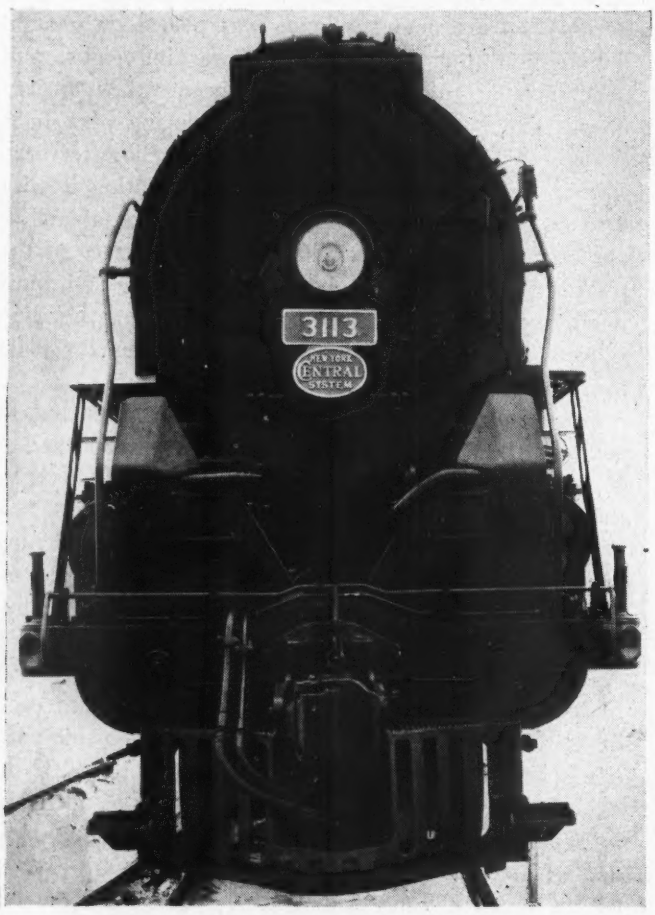
Given these conditions, uniform lighting of adequate intensity from sources concealed to the person going *down* stairs, with stair treads which reflect 50 per cent of the incident light, and lighting begins to show results. Based on data collected on stairways, the author says: "The intelligent application of artificial illumination should reduce the number of accidents by at least 50 per cent." Some of the records show less and some more than this reduction.

The findings on the subways may not apply exactly to other conditions, but they offer convincing proof of what may be expected from scientific lighting for the prevention of accidents.

Versatile Road Motive Power for the New York Central

Lima-built 4-8-2 locomotives, primarily for freight service, have 72-in. drivers, with tractive force equal to previously built power with 69-in. drivers

TWENTY-FIVE 4-8-2 type locomotives, built by Lima Locomotive Works, Inc., the first of which were delivered near the end of 1942, have served the New York Central effectively in meeting the steady increase in the volume of wartime traffic which has been offered since that time. These locomotives, known as the L-4a class, are in all essential respects, except two, the same as the L-3a class locomotives, 50 of which were delivered to the railroad beginning in December, 1940. The driving-wheel diameters have been increased from



69 to 72 in. and the cylinders from 25½ in. to 26 in., thus maintaining the tractive force within a few hundred pounds of that developed by the earlier type. These locomotives, the first of which was delivered on December 1 and the last on March 4, have accumulated 1,257,717 miles up to June 1, an average of about 10,681 miles per locomotive per month.

In a road test one of the L-3 locomotives developed a maximum indicated horsepower of 5,260 and a maximum drawbar horsepower of 4,120 at 58 m. p. h. The L-4's have not been tested, but it is estimated that they will develop a maximum of about 5,400 i.hp., and of just under 4,300 db. hp. at 60 m. p. h.

The L-3 class locomotives, 25 of which were equipped so that they were available for both freight and passenger service, demonstrated their capacity to handle heavy passenger service at fast schedule speeds. The new locomotives with their larger drivers are even better adapted for this service. They are a universal road service type.

These locomotives were ordered in February, 1942, and their design was, therefore, not subject to the full impact of the shortages of critical materials which developed rapidly following our entrance into the war. A number of substitutions were called for, however. These included the substitution of steel tubing for copper tubing, the replacement of the bronze bell by a welded steel bell, and the use of steel in the construction of the cab and in the running boards. Aluminum had been used for the cabs and running boards of the L-3 locomotives. This substitution is largely responsible for the increase in the weight of the L-4 locomotives.

The Boilers

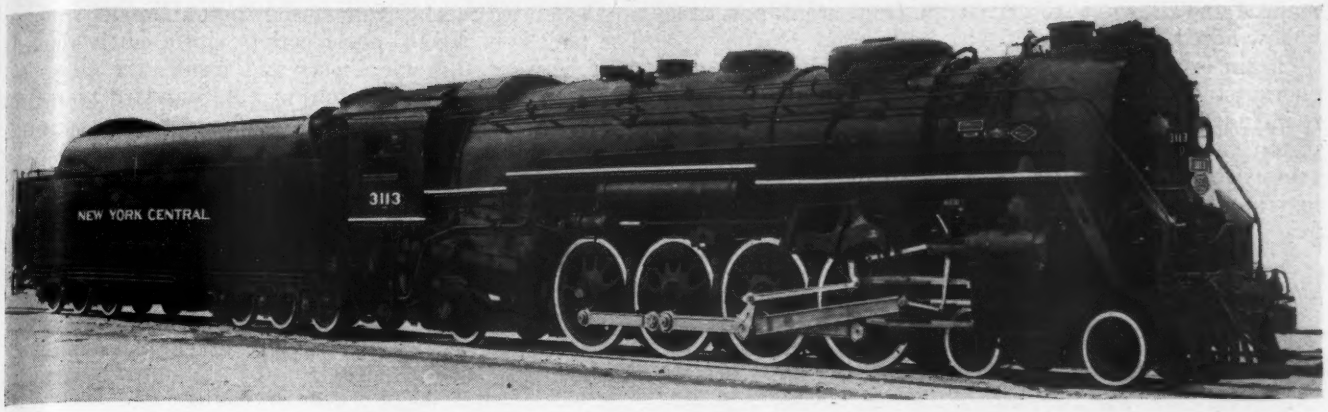
The boilers are of the conical type. The firebox has 75.3 sq. ft. of grate area and a 63-in. combustion chamber. The tubes are 20 ft. 6 in. long. Although they are operating at a working pressure of 250 lb., they are designed for a pressure of 255 lb. This pressure was also the basis of the machinery design.

Both firebox and boiler plates are of the basic open-hearth steel. The first shell course is of $^{15}/_{16}$-in. plate, while the second and third courses are $1^{1}/_{32}$-in. plate. The inside firebox is of welded construction throughout. The sheets are laid out so that the grain structure of the crown and sides runs longitudinally; the combustion chamber below the crown, circumferentially, and the inside throat sheet, horizontally. The bottom of both inside and outside firebox sheets are welded to the mud rings at the corners.

The calking edges between the back head and wrapper sheets are electric welded for a distance of about 29 in. up from the mud ring. The circumferential seam between the rear shell course, the wrapper sheets, and the throat sheet, and between the throat sheet and wrapper sheets are seal welded. The usual seal welding is also applied at the ends of the longitudinal joints in the shell.

There are four 2-in. combustion tubes through each side of the firebox.

The boilers are fitted with the Type E superheater and have the Worthington SA feedwater heater. The fireboxes have Firebar grates and are fired with the Standard HT type stoker with the engine mounted on



the tender. The boilers are fitted with the National Aluminite blow-down system.

Frames and Running Gear

The foundation of the locomotive is a General Steel Castings engine bed in which the cylinders, the back cylinder heads and air-pump brackets are an integral part. On 20 of the locomotives the driving wheels are Boxpok castings and on five, Scullin disc wheels. The axles are all hollow-bored. The driving-axle journal bearings are Timken double-roller type mounted in split housings. There is an end play of 3/16 in. on each side between the driving boxes and the pedestal shoes and the Alco lateral cushioning device provides for ½ in.

Comparison of Characteristics of New York Central 4-8-2 Locomotives

	L-2d converted 2998	L-3a	L-4
Builder	Alco	(25) Alco	Lima
Road numbers	2998	3000-3024	3100-3124
Date built	March, 1930	Dec., 1940	Dec., 1942
Service	Frt. and pass.	Frt. and pass.	Frt. and pass.
Weight on drivers in working order, lb.	257,000	262,000	265,800
Total engine weight in working order, lb.	385,100	388,500	397,300
Weight of tender in working order, lb.	313,500	374,200	377,000
Cylinders, diameter and stroke, in.	25½x30	25½x30	26x30
Driving wheels, diameter, in.	69	69	72
Steam pressure, lb.	250	250	250
Fuel	Bit. coal	Bit. coal	Bit. coal
Grate area, sq. ft.	75.3	75.3	75.3
Firebox heating surface, total, sq. ft.	354	373	373
Evaporative heating surface, sq. ft.	4,556	4,657	4,676
Superheater heating surface, sq. ft.	1,931	2,080	2,103
Tractive force, engine, lb.	60,100	60,100	59,900
Tractive force with booster, lb.	73,850	.....	.....

controlled lateral on each side of the front box and 5/16 in. on each side of the main boxes. The cushioning device is set for a resistance of 17 per cent of the weight at the rail on the front boxes and 8 per cent on the main boxes. The spring hangers are of the conventional gib types.

In counterbalancing the locomotives the out-of-plane effects are taken into account in all driving wheels and the main wheels are crossbalanced by angling the counterweights. The main wheels are counterbalanced to produce equal dynamic effect on both sides of the locomotive. This results in unequal compensation of the effect of the reciprocating parts on the two sides due to the difference in the angle of the rotating balance required for the two return cranks.

The reciprocating parts on these locomotives weigh 1,535 lb. on each side. The over-balance as it affects dynamic augment amounts to 115 lb. in each front driver, 166 lb. in each main driver, 132 lb. in each intermediate wheel, and 115 lb. in each rear wheel. The ratio of unbalanced reciprocating weight to the total weight of the locomotive is 1/366.

The four-wheel engine trucks are of the General Steel Castings constant-resistance type with SKF inside roller bearings in solid housings, mounted on hollow-bored axles, with 36-in. multiple-wear rolled-steel wheels. The wheel base is 86 in. These trucks are designed for a swing of 4¾ in. each side of the center. They have an initial lateral resistance of 40 per cent and a constant resistance of 33⅓ per cent.

The trailing truck is of the two-wheel Delta type with 44-in. multiple wear rolled-steel wheels. They have Timken roller bearings and hollow-bored axles. There is a complete installation of Timken heat indicators on all locomotive and tender journal boxes.

Both driving axles and engine-truck axles are of normalized carbon-vanadium steel. The trailer axles are medium carbon steel, normalized and drawn. Provision is made for the application of a booster on the trailing truck, also for the future application of air brakes. The truck has a lateral resistance of 20 per cent, both initial and constant. The pedestals both on the engine and trailer truck have spring-steel liners.

Driving Gear

The pistons, which are 26 in. in diameter, are of Timken chrome-nickel-molybdenum rolled steel of V-section, and the piston rods are of the same material. The rings are of the bronze-and-iron lipped type furnished by the Koppers Company, American Hammered Piston Ring Division. Both piston and valve stems have King type packing. The length of the piston rods permits removal of the piston heads for the renewal of packing rings without disconnecting the piston rods from the crossheads.

The alligator type crossheads are of Timken chrome-nickel-molybdenum steel with gun-iron shoes. The wrist pin is fitted with Timken roller bearings. The guides are applied to the back cylinder head with the Alco Slidguide attachment. The main and side rods are of manganese-vanadium steel, normalized and tempered. The back-end main-rod bearing is bronze in a one-piece floating bushing operating within a Hunt-Spiller gun-iron fixed bushing pressed in the rod. The floating bushing is flangeless and the main rod is spaced between the side rod and the eccentric crank by floating rings of soft steel. The side-rod bearings on the main and intermediate crank pins are also bronze floating bushings. The front and back crank-pin bearings are fixed bronze bushings.

The main crank pin is manganese-vanadium steel, normalized. The others are medium carbon steel, nor-

malized and drawn. All except the front crank pins are hollow bored.

Steam is admitted to the superheater through a Tangential steam dryer, and the American multiple throttle is included in the superheater header. The lightweight piston valves are 14 in. in diameter driven by a Baker gear with McGill Multirol needle bearings. The packing rings are Hunt-Spiller gun iron. The power reverse gear is the Franklin Precision type.

Lubrication and Cab Fittings

There are two force-feed lubricators on each locomotive. That on the right side feeds valve oil to the steam-chest cylinders, the air compressors, the stoker engine, and the feedwater hot pump. The lubricator on the left side supplies engine oil to the valve stem crosshead, the main guides, the driving boxes, the engine-truck and trailer-truck pedestal faces, to the trailer-truck center pin, and to the radial buffer between the engine and tender. In addition to the extensive oil lubrication, Alemite soft grease fittings are applied on the valve motion, power reverse gear, and throttle rigging.

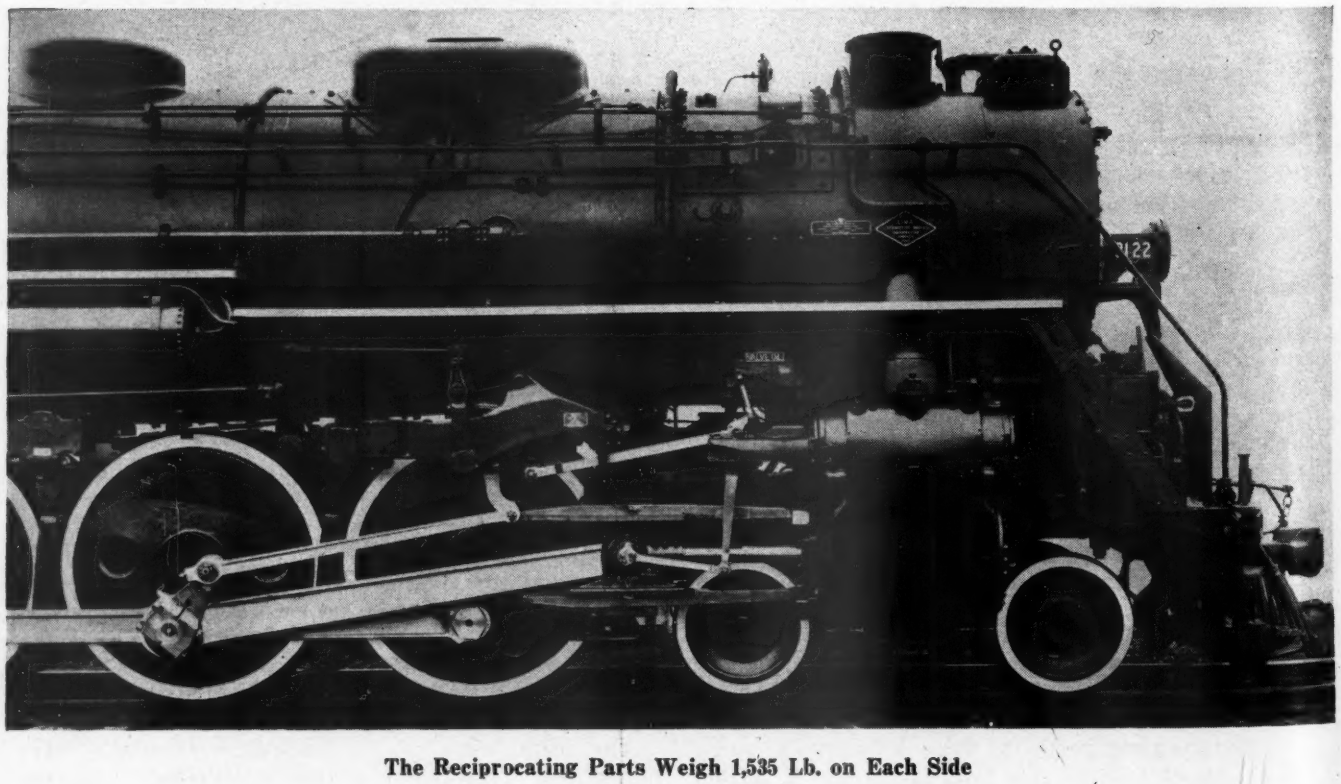
To keep within clearance limits on curves the cabs are slightly tapered, front to rear. They are of riveted-steel construction with wood lining and Agasote insulation. The windows are Pittsburgh laminated glass in Edwards steel sash. The cab curtains are of Mulehide. The boilers are protected with Barco low-water alarms. The blower is the only auxiliary supplied with superheated steam which is piped directly from the superheater header. Saturated steam for the remainder of the auxiliaries is taken from a turret located on the roof sheet just ahead of the cab. This is supplied through two drypipes which are fitted with Dri-Steam separators in the dome.

The engine-tender drawbar is the Unit Safety type and slack is controlled by the Franklin E-2 type buffers. Barco flexible joints are air and steam connections.

The tenders are of rectangular water-bottom type built up on General Steel Castings water-bottom tender frames. The tank is of riveted construction with a single riveted joint between the side sheets and frame, the edges of which are welded inside and out. A Standard type DA coal pusher is installed in the tender. There is also a water scoop.

General Dimensions and Weights of the New York Central 4-8-2 Type Locomotives, L-4a Class

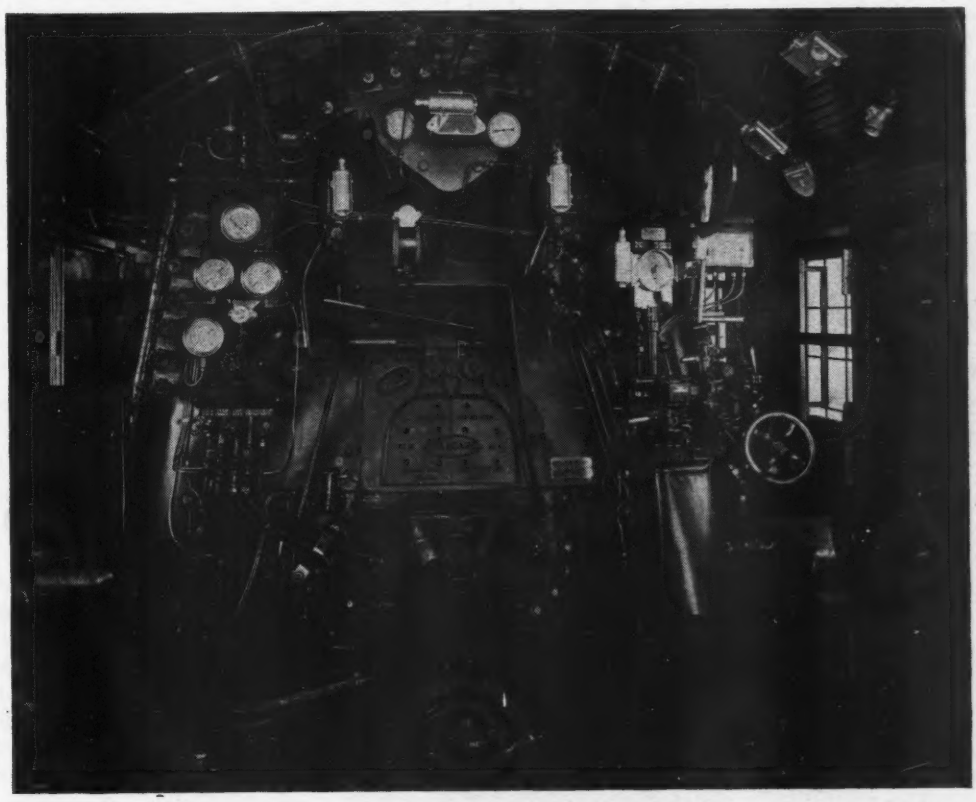
Railroad	New York Central
Builder	Lima
Type of locomotive	4-8-2
Road class	L-4a
Road numbers	3100-3124
Date built	Dec., 1942
Service	Freight and passenger
Rated tractive force engine, 85 per cent, lb.	59,900
Weights in working order, lb.:	
On drivers	265,800
On front truck	73,100
On trailing truck	58,400
Total engine	397,300
Tender	377,000
Wheel bases, ft.-in.:	
Driving	19—0
Engine, total	43—1
Engine and tender, total	95—11½
Driving wheels, diameter outside tires, in.	72
Cylinders, number, diameter and stroke, in.	2 — 26 x 30
Valve gear, type	Baker
Valves, piston type, size, in.	14
Maximum travel, in.	8½
Boiler:	
Steam pressure, lb.	250
Diameter, first ring, inside, in.	82 7/16
Firebox length, in.	120⅛
Firebox width, in.	90¼
Combustion chamber length, in.	63
Arch tubes, number and diameter, in.	5—3
Tubes, number and diameter, in.	50—2¼
Flues, number and diameter, in.	198—3½
Length, over tube sheets, ft.-in.	20—6
Fuel	Bit. coal
Grate area, sq. ft.	75.3
Heating surfaces, sq. ft.:	
Firebox and comb. chamber	338
Arch Tubes	35
Firebox, total	373
Tubes and flues	4,303
Evaporative	4,676
Superheater	2,103
Comb. evaporative and superheater	6,779
Tender:	
Type	Rectangular with water-bottom frame
Water capacity, gals.	15,500
Fuel capacity, tons	42½
Trucks	Six-wheel



The Reciprocating Parts Weigh 1,535 Lb. on Each Side

These tenders are of the same large capacity as those first used behind the L-3 class locomotives. Their coal capacity of 42½ tons is a large factor in the versatility of these locomotives in universal main-line service.

The six-wheel tender trucks have General Steel Castings frames with swing motion bolsters and are equalized. The multiple-wear rolled-steel wheels are 41 in. in diameter, mounted on axles of 6½ in. by 12 in. nominal journal sizes, fitted with SKF roller bearings. The brake rigging is the A.S.F. clasp type. There are two brake cylinders, mounted on the tender frame. The tenders are now fitted with Waugh-Gould draft gear No. 403 with Farlow 2-in. key type attachments and Type E swivel-butt couplers. The bed castings, however, are designed for the future application of Waugh rubber draft gears.



The Cab Interior—The Conduit for the Cab Lighting Circuits Follows the Curve of the Roof Back of the Boiler Head — There Is a Clothes Locker Behind the Engineman's Seat

Partial List of Materials and Equipment on the New York Central L-4a 4-8-4 Type Locomotives

Bed castings; engine and trailer trucks; pilot; front bumper; ash pan	General Steel Castings Corp., Eddystone, Pa.
Driving wheels	(20) General Steel Castings Corp., Eddystone, Pa. (5) Scullin Steel Co., St. Louis, Mo.
Engine- and trailer-truck wheels	(10) Armco Railroad Sales Co., Middletown, Ohio (15) Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Tires	American Locomotive Co., Railway Steel Spring Div., New York
Bushings in engine- and trailer-truck frames	Ex-Cell-O Corporation, Detroit, Mich.
Roller bearings—driving-box; trailer-truck; journal-box heat indicators	The Timken Roller Bearing Co., Canton, Ohio
Roller bearings—engine-truck boxes	SKF Industries, Philadelphia, Pa.
Springs	Crucible Steel Co. of America, New York
Spring preservative	Dearborn Chemical Co., Chicago
Lateral cushioning device; Slidguide attachment	American Locomotive Company, New York
Power reverse gear	Franklin Railway Supply Co., Inc., New York
Brakes and signal equipment	New York Air Brake Co., Watertown, N. Y.
Pilot coupler	National Malleable and Steel Castings Co., Cleveland, Ohio
Ferro vanadium for the steels for driving axles, engine-truck axles, main crank pins, and main and side rods	Vanadium Corporation of America, New York
Piston-rod and valve-stem packing; air-pump packing	U. S. Metallic Packing Co., Philadelphia, Pa.
Valve gear	Pilliod Co., New York
Cylinder cocks and operating valves	The Okadee Company, Chicago
Cylinder and valve-chamber bushings; main- and side-rod bushings; piston-valve packing rings	Hunt-Spiller Manufacturing Corporation, Boston, Mass.
Crank-pin bearings	Magnus Metal Div., National Lead Co., New York
Crossheads; piston rods	The Timken Roller Bearing Co., Canton, Ohio
Piston rings	Koppers Company, American Hammered Piston Ring Div., Baltimore, Md.
Blow-off cocks	(15) The Okadee Company, Chicago (10) Wilson Engineering Corporation, Chicago
Jacket steel	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Fire door	Standard Locomotive Equipment Company, Toledo, Ohio
Fire brick	General Refractories Company, Philadelphia, Pa.
Grates	Waugh Equipment Co., New York
Boiler tubes	(10) Globe Steel Tubes Co., Milwaukee, Wis. (15) Republic Steel Corp., Steel and Tubes Div., Massillon, Ohio
Staybolt iron	Joseph T. Ryerson & Son, Inc., Chicago
Flexible bolts; expansion stays	Flannery Bolt Co., Bridgeville, Pa.
Arch-tube plugs; washout plugs; cylinder port plugs	Huron Mfg. Co., Detroit, Mich.
Boiler braces	American Locomotive Co., New York
Exhaust-pipe gasket	Johns-Manville Sales Corp., New York
Continuous blow-down system	National Aluminate Corp., Chicago
Superheater; Tangential steam dryer	The Superheater Company, New York
Stoker	Standard Stoker Co., Inc., New York
Dri-Steam separator for turret drypipe	Dri-Steam Products, Inc., New York
Superheater pipes	(10) Globe Steel Tubes Co., Milwaukee, Wis. (15) Republic Steel Corp., Massillon, Ohio
Throttle	American Throttle Co., New York
Feedwater heater	Worthington Pump and Machinery Corp., Harrison, N. J.
Stoker and feedwater heater gages	Manning, Maxwell & Moore, Inc., Locomotive Equipment Division, Bridgeport, Conn.
Injector; boiler checks	Nathan Manufacturing Co., New York
Valves and valve trimmings	Ohio Injector Co., Wadsworth, Ohio
Line checks	Crane Co., Chicago
Boiler lagging	Johns-Manville Sales Corp., New York

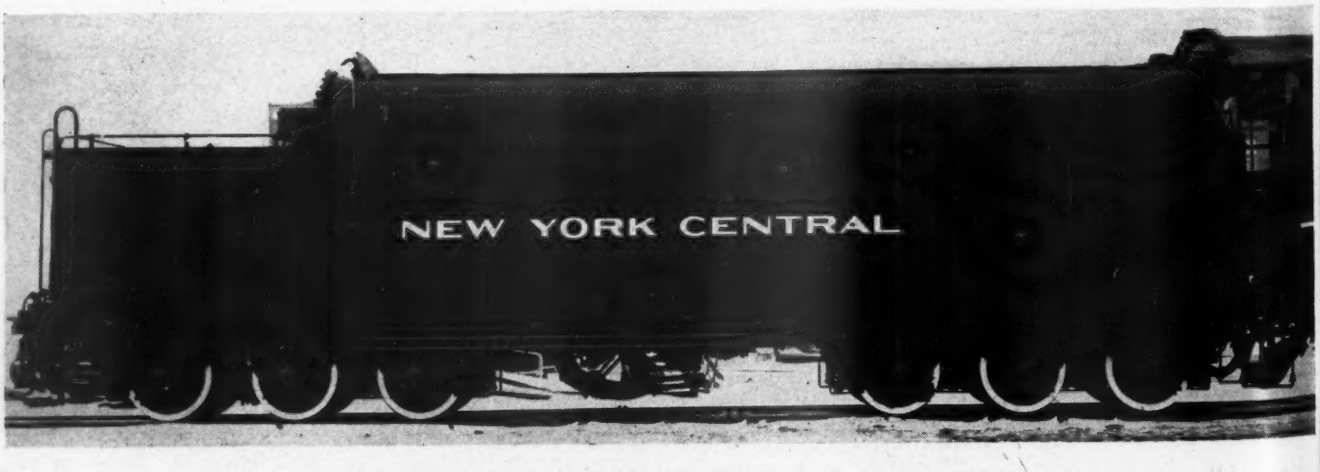
Smokebox blower fittings	Barco Manufacturing Co., Chicago
Smokebox netting	The W. S. Tyler Co., Cleveland, Ohio
Smokebox front gasket	The Garlock Packing Company, Palmyra, N. Y.
Pipe and pipe nipples	A. M. Byers Co., Pittsburgh, Pa.
Pipe fittings	Corley Co., Jersey City, N. J.
Pipe lagging	Union Asbestos & Rubber Co., Chicago
Safety valves; steam gages; sprinkler	Manning, Maxwell & Moore, Inc., Locomotive Equipment Division, Bridgeport, Conn.
Cab apron	Inland Steel Co., Chicago
Cab curtains	The Lehon Co., Chicago
Cab sash	O. M. Edwards, Inc., Syracuse, N. Y.
Glass (laminated)	Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Cab insulation	The Pantasote Company, Inc., New York
Air gages	Ashton Valve Co., Boston, Mass.
Water column	Nathan Manufacturing Co., New York
Water gages	The Okadee Company, Chicago
Steam-heat regulator and gage	Vapor Car Heating Co., Inc., Chicago
Sanders	Graham-White Sander Corp., Roanoke, Va.
Tubing for air lines to sanders, bell ringer and whistle; for feed lines from force-feed lubricators	Buhdy Tubing Co., Detroit, Mich.
Headlight	The Pyle-National Company, Chicago
Train control	General Railway Signal Co., Rochester, N. Y.
Whistle	Nathan Manufacturing Co., New York
Low-water alarm	Barco Manufacturing Co., Chicago
Valve Pilot	Valve Pilot Corporation, New York
Lubricators	Detroit Lubricator Co., Detroit, Mich. Nathan Manufacturing Co., New York
Grease fittings	Alemite Div., Stewart-Warner Corp., Chicago
Bell ringers	Railway Service and Supply Corp., Indianapolis, Ind.
Paint	The Glidden Company, Cleveland, Ohio
Piping between engine and tender	Barco Manufacturing Co., Chicago
Drawbar between engine and tender	Franklin Railway Supply Co., Inc., New York
Tender:	
Frame; trucks	General Steel Castings Corp., Eddystone, Pa.
Springs	Crucible Steel Co. of America, New York
Axles	Bethlehem Steel Co., Bethlehem, Pa.
Bearings	SKF Industries, Philadelphia, Pa.
Journal-box heat indicators	The Timken Roller Bearing Co., Canton, Ohio
Clasp brake rigging	American Steel Foundries, Chicago
Wheels	(10) Armco Railroad Sales Co., Middletown, Ohio (15) Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Draft gear	Waugh Equipment Company, New York
Draft-gear attachment; swivel butt coupler	The Symington-Gould Corp., New York
Swing-hanger bushings	Ex-Cell-O Corporation, Detroit, Mich.
Coal pusher	The Standard Stoker Co., Inc., New York
Washout plugs	Huron Mfg. Co., Detroit, Mich.
Piping	A. M. Byers Co., Pittsburgh, Pa.
Manhole and back-up lamps	The Pyle-National Company, Chicago
Tank-water level indicator	Manning, Maxwell & Moore, Inc., Locomotive Equipment Division, Bridgeport, Conn.
Steam-heat connection and coupling head	Vapor Car Heating Co., Inc., Chicago

Inside the 42½-Ton Tender Coal Space

Claim Agents Meet

THE dislocation of normal life brought about by the war are reflected in every phase of claim handling, from the preliminary report of an accident to the final settlement, according to W. J. Heckman, assistant general claims attorney of the Illinois Central, in a paper read before the fifty-fourth annual meeting of the Association of Railway Claim Agents at Chicago on June 16. The one-day meeting, over which President H. L. Hanson, chief claim agent of the New York Central, presided, was attended by 257 representatives of the claim departments of 54 member railroads. Those in attendance directed the executive committee to select the date and place of the 1944 meeting if conditions are favorable.

Officers elected for the ensuing year are: President, P. C. Garrott, general claim agent of the Baltimore & Ohio, Baltimore, Md.; vice-presidents, O. F. Gnadinger, claim agent of the Elgin, Joliet & Eastern, Joliet, Ill.,



This Large Tender Design Was First Used on the L-3a Locomotives Built in 1940

M. B. Pears, general claim agent of the Southern Pacific in Texas and Louisiana, New Orleans, La., and H. C. Minning, chief claim agent of the Erie, Cleveland, Ohio; and secretary-treasurer, F. L. Johnson, claim agent of the Alton, re-elected.

"First and foremost in the changes brought about by war conditions," Mr. Heckman said, "is that of personnel. Some lines, I am informed, are experimenting in the use of women claim agents, but this departure is still too new to show definite results. Even those who have had some success in this change admit the work must be carefully selected, and the 'mine-run' claim work must still be apportioned to men.

"The personnel question of course also seriously affects all other departments. The only man who seems to have time on his hands is the lawyer—and is he using it? Legitimate legal business has suffered materially from war conditions—many attorneys have gone into service or into war activities—legal or otherwise. Unfortunately one of the few fields of law endeavor which has flourished under the abnormal situation is that of the damage suit. Solicitation has reached a new high, and the flood stage has not yet been passed. So long as war time values and evaluation persist, we may expect the situation to become no better.

"Last, but by no means least, is the matter of inflation, or shall we say loss of perspective and sense of value. When people in most walks of life suddenly have almost unheard-of incomes thrust upon them, when new and better jobs are theirs for the asking, when prices and values are out of joint with every known common sense criterion, when every newspaper carries articles referring to millions and even billions as everyday amounts, is there any wonder that the average man has a hard time keeping his feet on the ground. And that average man is your juryman, or even worse, his wife is. Is it surprising that in this environment he is generous with your money when placing a value in money on an arm, a leg or a life? And with large verdicts rampant, don't you yourself sometimes wonder or admire the mental process by which an injured employee actually accepts a settlement based on common sense?"

The seriousness of accidents at the present time was emphasized by President Hanson in his opening remarks. "According to one authority," he said, "the accident toll in the nation, unless curbed, will hamper the war effort as effectively as enemy guns. Over 460,000,000 man days, not hours, the equivalent of one and one-half million full-time workers, were lost to American industry last year through accidents. The time lost during the year through non-fatal injuries to workers alone was equivalent to a shutdown of the nation's entire shipbuilding and aircraft industries for 54 days. The representative of one insurance company calls carelessness our Seventh Column and says that it is so disastrous in slowing down war production that, by comparison, the undercover work of Axis agents is child's play; further, that it killed 102,500 Americans last year, injured 9,300,000 more, and destroyed more property than all the saboteurs of the Axis Fifth Column."

The report of the Grade Crossing committee likewise called attention to the seriousness of accidents and advocated crossing laws with appropriate penalties. "An average of 435 passenger trains are delayed a total of 200 hours each month by grade crossing accidents," the report stated, quoting the National Safety Council. "Every month an average of 702 freight trains, most of them carrying vital war goods, are delayed an average of 460 hours because of carelessness of men and women who drive automobiles. Grade crossing accidents reap a tremendous toll of life and property in America. Each year an average of 4,000 such accidents bring death to 1,875 occupants of automobiles and injury to 4,700 others. In addition, 200 of these accidents each year cause derailment of passenger or freight trains, resulting in death or injury to passengers and train crews.

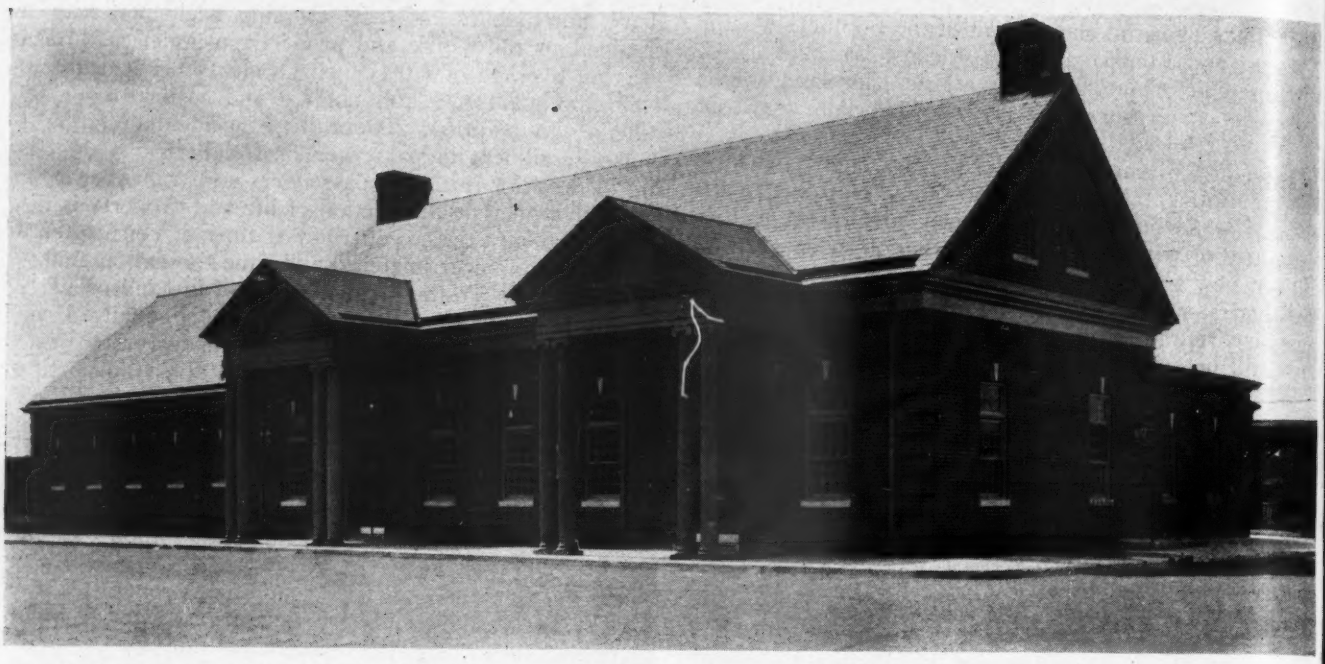
"Such wholesale destruction of life and property is deplorable at any time. But in war-time, it constitutes a drain on manpower, material and time the nation simply cannot afford. To the inevitable loss of life and property must now be added a third loss, which is equally disastrous to the nation's war effort. It is the delay to trains.

"Trains today may be, and usually are, transporting troops, or at least individual officers and other military personnel. They may be, and usually are, transporting war material—whether it be a rush shipment in the express car of a passenger train or several car loads of vital war goods in a freight train. A delay in the movement of such trains easily can affect seriously the nation's all-out effort to win the war.

"In the opinion of the Chairman of this committee, the A. R. C. A. should go on record as urging railroad managements, their legislative committees and the Association of American Railroads to initiate concerted action by all bodies interested in public safety toward the enactment of railroad crossing laws with appropriate penalties in all states not already having them. If it should develop that this goal is impossible of achievement in some of the states, compromise legislation should be sought providing for the designation of certain crossings as 'dangerous,' at which all traffic must stop within specified distances from the tracks; and further providing for a slow down to a certain specified speed at all other crossings; and still further providing that certain types of vehicles such as buses, trucks, tractors, trailers, etc., carrying inflammables or explosives, and specified types of heavy vehicles shall stop at all crossings."

A tabulation of crossing accidents prepared by the committee showed that while the number of accidents and the number of injuries decreased in 1942 compared with 1941, fatalities increased, the figures being 4,150 accidents in 1942 and 4,320 in 1941, 4,616 injuries in 1942 and 4,885 in 1941 and 1,970 fatalities in 1942 and 1,931 in 1941. A study of crossing protection showed relatively little change in the ratio between protected and unprotected crossings for the nine-year period from 1933 to 1941. Of 235,827 crossings in 1933, 87 per cent, or 205,199, were not specially protected, while of the 229,722 crossings in 1941, 86 per cent, or 196,863, were not specially protected.

Other topics presented were as follows: The Effect of Recent Court Decisions on Claims Under the Federal Employers' Liability Act, by William T. Faricy, general counsel of the Chicago & North Western; Weights and Measures in the Handling of Claims, by C. H. Feagan, claim agent of the Southern; Handling of Marine Claims, by V. P. Sennett, assistant claims attorney of the Lehigh Valley; Cause and Prevention of M. of W. Accidents, by Frank O. Divisek, assistant chief claim agent of the Denver & Rio Grande Western; Advance Allowances to Injured Employees, by H. A. Fathauer, assistant chief claim agent of the New York Central; Claim Agent, Claim Adjuster or Special Representative—Which Is the Best Title?, by J. A. Lee, claim agent of the Southern; Locomotive Boiler Explosions, by Ray McBrian, engineer of tests of the Denver & Rio Grande Western; and False Arrest and Malicious Prosecution, by L. S. High, special attorney, A. C. L.



The Seaboard's New Station at Raleigh, N. C.

New Passenger Station Promotes Operating Efficiency

Seaboard leaves Union Depot at Raleigh, N. C., with its stub-end layout requiring back-in movement, for a main-line structure permitting through operation

PASSENGER trains of the Seaboard operating through Raleigh, N. C., have been speeded up an average of about 15 min., and delays to freight trains formerly occasioned by the blocking of the main tracks by passenger trains have been eliminated, as the result of the construction of a new passenger station at that point. Not only is the railroad experiencing these substantial operating advantages as a result of this project, but it is also realizing the benefits of conducting business with the traveling public through an attractive modern station, which, incidentally, was designed in such a manner as largely to eliminate the need for critical materials. This new station has been named in honor of the late Eugene C. Bagwell, formerly chief operating officer of the Seaboard, and a memorial plaque with an appropriate inscription has been placed in the front wall of the station near the entrance doors. Mr. Bagwell was born at Raleigh, and it was here that he held his first position with the railroad.

Disadvantages of Old Layout

Raleigh is an important city on the Seaboard's main line to Florida and other Southern points. Formerly, this company used the Union Station in that city, which it owned jointly with the Southern, and which is also used by the Norfolk Southern. Located at the corner of Martin and Dawson streets, the Union Station is at the end of a spur about 1,400 ft. long, which connects with the Seaboard's double-track main line near the southerly end of a 10-deg. curve. The arrangement was such that northbound passenger trains continued directly onto the station spur, backing out after finishing their station work, while southbound trains required a back-up movement over a crossover between the two main tracks and thence onto the spur track to the station. In either case, about 15 min. more was required for passenger trains to get into and out of the station than would have been necessary with a station on the main line.

More recently, the existing arrangement had become a disadvantage in still another respect. Prior to the outbreak of the war, Seaboard passenger trains rarely contained more than 10 cars, a number that could be accommodated on the station spur without fouling the main line. However, the wartime increase in passenger traffic has made it necessary frequently to operate trains of as many as 17 cars, and when northbound trains containing more than 12 cars pulled into the Union Station the rear-end cars projected out onto the through main line, thereby blocking movements on the northbound main track. Moreover, when a long southbound train was backed over the crossover between the two main tracks and into the station spur, it not only fouled the north-

bound main, but also the head end of the train projected over the crossover onto the southbound main. The resulting delays to freight trains proved highly objectionable, especially in view of the imperative need for handling wartime traffic with the utmost efficiency.

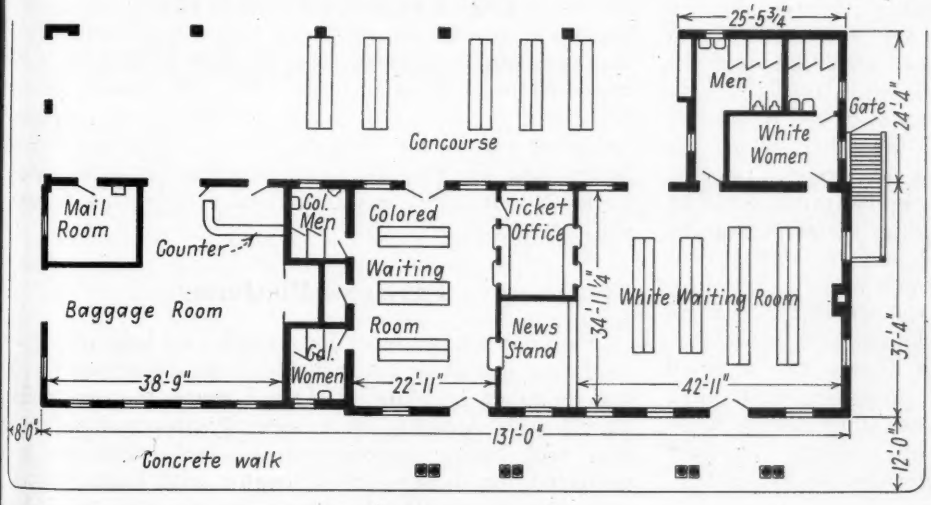
In 1941, the decision was reached by the railroad to eliminate these disadvantageous aspects of the layout at Raleigh by building a new passenger station adjacent to the main line, thereby permitting through operation. For various reasons it was decided that the best available location for the new station was on the east side of the tracks at the foot of Franklin street, this location being some distance north of the Union Station, which continues to be used by the Southern and Norfolk Southern. One reason for locating the station at Franklin street is that there are existing main-line facilities for coaling, watering and sanding steam locomotives at the company's engine terminal a short distance south of this point, and the station could be so located as to permit the engines of southbound trains to be serviced while the trains are spotted at the station. Also, at this location there are sufficient tracks available to permit freight trains to be routed around the station layout. Finally, the Franklin Street site is conveniently situated with respect to the State Capitol building and the city's business and shopping districts.

An attractive modern colonial-type station of brick construction was designed for the new location. Since the plans for the new structure were drawn before the material situation became critical, the original design and specifications called for the use of standard materials, including structural steel butterfly canopies, with corrugated asbestos roofs, over the passenger platforms, copper flashing, a tin roof over the concourse, and lintel supports consisting of new steel angles. However, as the railroad was about to award the contract for the station late in 1941, more stringent limitations were imposed on the use of certain scarce materials by the War Production Board, and it became necessary to revise the design of the station in certain respects to reduce to a minimum the quantities of critical items needed.

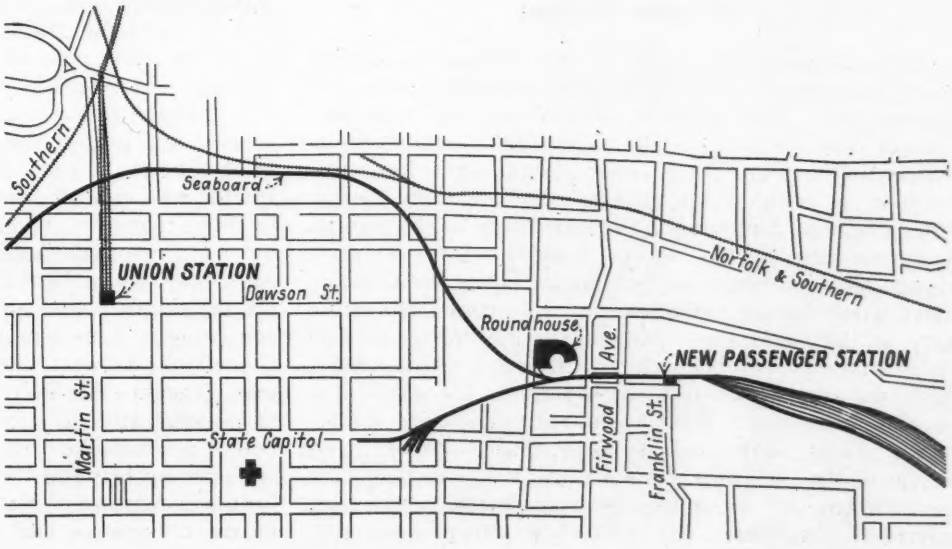
Old Steel from Abandoned Bridge Re-used

For instance, wood columns and framing were substituted for the structural steel in the platform canopies, and the corrugated asbestos roofs were replaced with wood sheathing covered with built-up roofing. Also, the tin roof on the concourse was replaced with built-up roofing, galvanized iron was substituted for the copper flashing, and scrap or second-hand metal was used wherever possible, such as in the lintels and as protective armor for the wood columns. For these latter purposes, old steel from an abandoned bridge, reworked as necessary, was used.

A contract for the construction of the new station in accordance with the revised design, was awarded on February 9, 1942. However, this event by no means



Floor Plan of the New Station at Raleigh, N. C.



This Map of a Portion of the City of Raleigh, N. C., Shows the Location of the New Station Relative to that of the Union Station

marked the end of the railroad's difficulties in obtaining materials. For instance, after substituting wood for steel in the design, the issuance by the War Production Board of Limitation Order L-121 covering lumber caused considerable delay before arrangements could be made at Washington to obtain the necessary material. Moreover, as the work proceeded it became necessary to make many minor changes in details because of the material situation, and in several instances it was found necessary to appeal to the WPB for higher preference ratings. The experience of the Seaboard with its Raleigh station constitutes a typical example of the difficulties encountered in carrying out railroad construction projects under wartime conditions.

General Features

The new station is a single-story structure of brick-and-frame construction with concrete foundations and floors. Including the concourse, which is open on two sides, the structure is rectangular in plan and is 61 ft. 8 in. by 131 ft. in overall dimensions. With the exception of the concourse and the toilet rooms for white patrons, the station facilities are housed in a full-length section of the structure, having a width of 37 ft. 4 in., except that a portion at the south end, containing the baggage room and the toilet facilities for colored patrons, is slightly narrower, being about 36 ft. 3 in.

This main section of the building has a roof of the gable type, supported by timber trusses and covered with slate shingles, and a pleasing rambling effect is imparted by the fact that the roof over the narrower section (baggage room) is somewhat lower than that over the other portion. This latter portion, which is 81 ft. 4 in. long, contains the white waiting room at the north end and the colored waiting room at the other, which are separated by the ticket office and a newsstand. Located in a projection on the west or track side of the building at the north end are the toilet facilities for white patrons and a rest room for white women, and the covered concourse is located in the angle formed between this projection and the main section of the structure. Except for brick-enclosed supporting columns and brick curtain walls, the concourse is open on the two exposed sides. The concourse and the projection containing the toilet facilities have inclined roofs supported by wood trusses and covered with built-up roofing. Daylight illumination in the concourse is afforded by skylights.

Exterior Design

In the design of the exterior of the station, the colonial motif was carried into every possible detail with scrupulous care. For instance, each of the two main entrances (one for each waiting room) has a gabled portico supported by four fluted wood columns with decorative capitals of composition material, and in each portico the gable area, containing a circular design of terra cotta, is faced with stucco. Other features of the exterior design that contribute to the colonial aspect are a decorative wood cornice extending entirely around the structure at the eaves line, double-hung multiple-pane sash in all windows, two brick chimneys, one of which is false, and two quarter-round wood louvers in the gable area at the north end. Both main entrances have double wood doors with multiple-pane glazed panels, and these doors, as well as most of the windows, are surmounted by multiple-pane transoms. A pleasing aspect of the station exterior is the effective use that is made of cast stone trim, which appears in the sills of the windows and louvers, and as a single piece, shaped like a keystone, in the lintel of each window and door, the lintels being otherwise of brick. All wood trim on the exterior is painted a buff color.

In the attractive nature of its finish and appointments, the station interior is comparable in every way with the exterior. In all public rooms the walls and ceiling are of plaster on metal lath, and in both waiting rooms there is a moulded plaster frieze along the tops of the walls. The walls in the waiting rooms are a light buff color and the ceilings are white. In the toilet rooms, both walls and ceilings are white. Tile wainscottings are provided in all public rooms, which are a buff color in the two waiting rooms, while in the toilets they are a white color with black base and cap strips.

The floors in the public rooms are of terrazo, which, in the waiting rooms, is made with pink Tennessee chips and slightly tinted mortar, while in the toilet rooms black chips with white mortar are used. In keeping with the present-day trend, fluorescent lights are used in all public rooms except the toilets, which have incandescent lights. Ample seating capacity is provided in the waiting rooms by back-to-back and wall settees. In the concourse, which has a concrete floor and stucco ceiling on metal lath, additional seating capacity is provided. Other features of the concourse are recessed ceiling lights, and a recessed bank of parcel lockers in the north wall.

For heating the station, an oil-fired steam boiler is provided in a small basement at the north end of the structure, which is reached by an exterior stairway. This plant is also used for supplying steam for heating Pullman cars, and for this reason a pressure of 50 lb. is maintained in the boiler at all times during the heating season. All parts of the station are provided with recessed radiators except the baggage room, which has a unit heater, and the flow of steam to these fixtures is controlled automatically by a motorized valve with a thermostatic control.

Passenger Platforms

The facilities at the station include two long passenger platforms, one along the east side of the northbound track and the other, an island platform between the two tracks. Paved with Amiesite on a specially-prepared soil-type base and having concrete curbs, both platforms are protected for most of their lengths with butterfly canopies which, as already noted, are entirely of timber frame construction. The supports for the canopies consist of 10-in. by 10-in. timber columns, spaced 20 ft. apart, the lower ends of which are connected to concrete footings with re-used steel channels, the latter extending 3 ft. into the concrete and the same distance above it to support and protect the columns.

At the top of each column, the supporting members for the roof consist of a crosspiece, embodying two 3-in. by 8-in. members, two transverse knee braces of 6-in. by 8-in. materials, and two longitudinal knee braces consisting of 4-in. by 8-in. pieces. Most connections here are the simple bolted type except that timber connectors, consisting of Teco 4-in. shear plates, are employed at the connections between the crosspieces and the transverse knee braces. For decorative purposes, the ends of the crosspieces and the undersides of the knee braces are cut in a scroll-like pattern.

Spanning between the columns are three lines of roof beams, consisting of 6-in. by 12-in. members at the ends of the crosspieces and 4-in. by 10-in. members in the

center. Over these are 2-in. by 6-in. rafters supporting 1-in. tongue-and-groove sheathing on which the built-up roofing is placed. The roof drainage system embodies strainers and downspouts at alternate columns, the strainers and the upper parts of the downspouts being of galvanized iron, while the lower parts of the latter are of wrought iron. From the lower ends of the downspouts, cast iron pipes lead through the footings to longitudinal sub-drains. A sub-drainage system is provided under the northbound track, consisting of 8-in. perforated corrugated laterals spaced 40 ft. apart, which feed into one of the longitudinal drains.

From the track side of the station to the nearest butterfly canopy, the distance is about 28 ft. and for somewhat more than the length of the station this area, which is paved with concrete, is also covered with a frame canopy. Surrounding the station on the other three sides are concrete sidewalks, and a system of paved drives gives access to it from nearby streets.

All work involved in the construction of the new station was performed under the general direction of W. D. Faucette, chief engineer, and under the direct supervision of W. L. Darden, assistant chief engineer. J. C. Williams, engineer of buildings, was in direct charge of the design. The Wadesboro Construction Company, Wadesboro, N. C., was the general contractor on the project.

Call Joint Action in Rate-Making Essential

THAT railroad rate-making machinery in the form of bureaus and conferences in which carriers act jointly not only is not undesirable but is in fact highly essential and in the public interest, the Senate Committee on Interstate Commerce was informed this week by representatives of shippers and carriers.

The presentation of the railroads' views on legislation proposed by Senator Wheeler, Democrat of Montana and chairman of the committee, to provide for regulation of rate conferences under the Interstate Commerce Commission (S. 942), and their attitude toward the evidence put into the record by the Department of Justice in support of its claim that long-standing rate-making procedures constitute violations of the antitrust statutes was started on June 22, when Judge R. V. Fletcher, vice-president of the Association of American Railroads, began a statement summarizing the historical and legal background of joint action by railroads both in rate-making and in other fields.

A. A. R. Issues No Orders

Judge Fletcher opened his remarks by outlining the functions of the A. A. R. This he was led to do, he explained, in view of certain observations made to the committee by "employees of the Department of Justice." The A. A. R., he told the committee, has no authority to issue or enforce orders. It has not undertaken to control rate policies or to dictate rates. In the field of rate-making and tariff changes it has only served as a medium for consultation, collecting information, and offering advice, he declared. That its recommendations are given serious consideration by member roads is due to the confidence they have that it strives to serve the interests of the industry, he pointed out.

Going on to explain how the activities of the A. A. R. are financed by assessments, and how it deals not only with rate questions affecting the industry as a whole, but also with many other matters in such fields as demurrage practices, safety rules, and the interchange and repair of cars, where thtre is obvious need for joint action by the railroads in their own interest and that of the public, Judge Fletcher pointed out that the organization was also engaged in institutional advertising on behalf of the industry, and in advancing its technological progress. In this connection he called attention to the A. A. R. directors' recent action authorizing the appointment of a director of technical research to advance the industry's preparations to meet post-war problems.

Moreover, he continued, the A. A. R. represents the industry before Congress and in dealing with many government departments, where it would be out of the question for every individual road to represent its interests each time they are affected. If this activity constitutes "lobbying," he remarked, at least the methods employed by the association compare favorably with those of certain government departments.

Justice Department's Views Analyzed

Beginning his review of legislative action and court decisions leading up to the present position of the railroads and their rate-making machinery with respect to the antitrust laws, Judge Fletcher observed that very little of the testimony of employees of the Department of Justice before the committee had dealt with the subject matter of the bill under consideration, though it went at great length into other questions, so emphasizing their failure to understand how the transportation system functions.

The theories of the Department of Justice, the A. A. R. vice-president told the committee, do not stem from intelligent comprehension of rate-making. Fundamentally, he said, the department's presentation does not indicate understanding of the distinction between a regulated and an unregulated industry.

The prosperity and success of shippers depend on the stability and impartiality of their freight rates, Judge Fletcher remarked, and to maintain these conditions the wisest and best informed public authorities have recognized from the first the necessity for joint action by the carriers. The original Interstate Commerce Act gave the commission very little authority over rates, he pointed out, and it was not very effective in protecting the public against discriminatory practices, but through later legislation the commission had been granted more and more powers in that field.

Endorsements of the conference method of rate making were found by Judge Fletcher in pronouncements of the I. C. C., the courts, and "eminent economists," and in the acts of Congress itself. In the latter connection he cited that provision of the Shipping Act of 1916 which authorized conference agreements among water carriers. "Nowhere except among the employees of the Anti-Trust Division of the Department of Justice," he said, "can any sentiment be found that we should turn back the clock of progress to those pioneer and primitive days when railroads were in the habit of reducing rates and engaging in rate wars, to the obvious injury of the carriers and to the equally obvious injury of the shipping public. I cannot resist the impression that the attitude of the Anti-Trust Division simply represents the rather familiar attitude of a zealous prosecutor who has tasted blood in some fields of endeavor and is consumed by the adventurous prospect

of going about like a lion seeking whom he may devour."

Among Judge Fletcher's citations of I. C. C. decisions was his reference to the Fifteen Per Cent Case of 1931 wherein the commission commented upon what it conceived to be the necessity for the elimination of "wastes" through cooperative action on the part of the railroads. Chairman Wheeler broke in to ask if there were not still a great many "wastes"; and Judge Fletcher replied that he presumes there are, just as in all other commercial activities. He then went on to voice his suspicions that if a complete elimination of "wastes" were achieved, "the things you give up would be more important than the things you gain."

When the A. A. R. vice-president turned to his defense of the Western Commissioner Plan, Chairman Wheeler observed that the Department of Justice was complaining about the elimination of competition in rate making—not about those phases of the plan which contemplated the elimination of "competitive wastes." To which Judge Fletcher replied that he "rather suspected" that they "had in mind making a case that they could take to court and exploit, rather than proceeding along sound lines."

The commissioner plan, Judge Fletcher went on, was inspired by the I. C. C.'s remarks about "wastes" in the Fifteen Per Cent Case of 1931. He then rested his defense of it on a memorandum prepared by W. A. Harriman, chairman of the Union Pacific Board, who is now serving as minister to Great Britain. The Harriman memorandum, as read into the record by Judge Fletcher, also mentioned the I. C. C.'s 1931 pronouncement, saying that the plan grew out of this suggestion and economic conditions of the time. Mr. Harriman recalled that the depression was on and that there was much talk of the need for a "railroad czar." The Western lines, he insisted, were of the opinion that the agreement was in the public interest; and it was not filed with the I. C. C. because it was the opinion of counsel, "and still is," that filing was not required. At the same time, however, it is "not true" that the agreement was a secret, for it received "nationwide publicity."

Commissioner Plan Prepared Roads for War

In Mr. Harriman's opinion the plan was "not the least of the things which prepared the railroads for the war"; and if it were a conspiracy, he thinks "the railroads of this country need bigger and better conspiracies." It was discontinued, the U. P. chairman added, because it became unnecessary under wartime conditions; but if such agreements among the railroads require legislation, "then let us have the legislation."

With respect to the failure to file the agreement with the I. C. C. Judge Fletcher suggested that it was "at least a doubtful question" as to whether filing was required. Senator Wheeler thought the law was "perfectly plain" on the point. And that prompted the A. A. R. vice-president to remark that if the law should be construed as requiring the filing, the failure to do so was a "minor infraction" in view of the fact that the I. C. C. and the public were well informed about the plan.

The memorandum wherein Judge Thurman Arnold, former assistant attorney general in charge of the Anti-Trust Division, had outlined "our transportation plans," making various charges against the railroads was characterized by Judge Fletcher as an "inaccurate and fantastic" document "prepared in ignorance of the real facts of the situation." The A. A. R. vice-president answered the memorandum's charges that the Railway Express Agency had suppressed air freight transportation, that the railroads are obstructing the construction of pipe lines, and that they were backing a proposal to merge certain trucking companies into a single operation along the Atlantic Seaboard. He freely admitted, however, that the railroads have opposed the St. Lawrence waterway, adding that in that respect they "are in good company and share this opposition with probably nine-tenths of the people of the United States."

With respect to the proposed legislation, Judge Fletcher said that the railroads are entitled to a statute which would give the I. C. C. authority to adopt general rules for the control of rate bureaus and associations, and include provisions granting immunity from prosecution under the anti-trust laws to those who conform to and act in accordance with such rules. He pointed out that the Wheeler bill does not have the latter provision. He also objected to the provision stipulating that every rate proposal shall be finally acted upon by a bureau within 30 days from the time the proposal is submitted. Neither would he create a set-up wherein an I. C. C. representative would participate in bureau meetings—"there ought to be a clear line of demarkation between the initiation of rates and the I. C. C. decision."

After Director Joseph B. Eastman of the Office of Defense Transportation had completed his statement to the commitee, as reported in *Railway Age* of June 19, page 1229, the hearings were recessed to June 21, at which time three representatives of shippers' organizations—Charles R. Seal, chairman of the legislative committee of the National Industrial Traffic League, Allen Dean, spokesman for the Detroit Board of Commerce, and C. E. Widell, director of the transportation department of the Tennessee Manufacturers' Association—gave the commitee the views of their respective organizations on the proposed legislation.

Mr. Widell indicated opposition to the general provisions of the bill, though he went on to suggest certain provisions that might be incorporated in legislation for rate bureau regulation if any such legislation is enacted. Mr. Dean, on the other hand, expressed on behalf of the shippers represented by him general support of the Wheeler bill, with certain modifications. "Stability of rates is almost as important to the shippers as the level of the transportation charges themselves," he said, going on to point out that the present rate-making machinery provides this stability. Joint action through rate bureaus is necessary, he suggested, to the efficient functioning of the carriers. If such bureaus are not now free from the effects of the antitrust laws, they ought to be, he declared.

The N. I. T. League, said Mr. Seal, considers it essential to preserve the general plan and procedure under which rate matters are considered. It is that body's opinion, he pointed out, that "existing laws, if applied according to prior decisions of the Supreme Court, fully authorize proper rate and classification committee procedure," and provide protection for independent action of individual carriers, so that no additional legislation is necessary.

Mr. Seal's statement constituted, in general, an endorsement of collective consideration and action by carriers with respect to rates and related matters. "Indiscriminate competitive rate-cutting is equally as injurious to shippers as to carriers," he told the committee. If individual carriers set their rates independently, he pointed out, shippers often would be deprived of the opportunity to study and state their views on proposed changes that they now have through the docketing procedure of the rate bureaus. The witness put into the

record also the text of an agreement between the N. I. T. League and the executives of the three principal territorial railway groups which was designed "to safeguard the interests of shippers through assurance that changes in rates which might be discriminatory or otherwise injurious would not be made without due notice and opportunity to be heard."

Rate Bureaus Protect Small Shippers

"There is no practicable way of arriving at rate adjustments or changes that would be satisfactory to shippers and to the carriers except through the bureau method," Mr. Seal went on to say. The rate bureau serves to protect the small shippers against the large shippers, he explained. "Collective action by railroads to assure adequate revenue to them as a whole tends to promote the interests of shippers as well as of the carriers," he added, pointing out that shippers are protected by the Interstate Commerce Act against discriminatory or otherwise harmful actions by the bureaus. If there is to be legislation to regulate rate bureaus, the N. I. T. League considers a general statement of policy, leaving regulatory details to the discretion of the Interstate Commerce Commission, superior to the detailed restrictive provisions of the Wheeler bill, he told the committee.

Questions directed at Mr. Seal and at representatives of the railroads who were present at he hearing, including Judge Fletcher and A. F. Cleveland, vice-president, traffic department, of the A. A. R., by members of the committee—particularly Chairman Wheeler (Democrat of Montana) and Senators Reed and Shipstead (Republicans of Kansas and Minnesota, respectively)—went beyond the immediate provisions of the proposed legislation to explore the background and significance of the decision of the United States Supreme Court, made public June 14, in the Illinois Inland Waterways case involving the application of proportional rates on grain shipped east through so-called rate-break points, such as Chicago (reported in *Railway Age* of June 19, page 1235). Senator Shipstead particularly did not voice complete agreement with Judge Fletcher's attitude that the position of the railroads in that controversy was proper, as long as both the Interstate Commerce Commission and the Supreme Court had supported their view. Judge Fletcher went on to point out that the decision did not mean that ex-barge grain was not entitled to any proportional rates, but only that it was not automatically entitled to the same proportional rates as grain arriving at Chicago by lake vessels or all-rail routes.

The committee heard two representatives of shippers on June 22—Frederick W. Burton, on behalf of the Atlantic States Shippers Advisory Board, and Walter R. Scott, secretary and transportation commissioner of the Board of Trade of Kansas City, Mo., an organization of grain dealers and millers. Mr. Burton appealed to the committee not to enact legislation that would destroy the long-standing general procedure of carrier rate bureaus, which his organization considers to be fully in the public interest. Statutory recognition should be given the existing rate-making machinery and the principle of collective action, he said, but a simple provision authorizing the I. C. C. to regulate such activities would meet the situation better than the rigid restrictions of the Wheeler bill, he suggested.

Mr. Scott expressed full agreement with the purpose of Senator Wheeler's bill to "remove any cloud of illegality" over rate bureaus and their operations. He, too, opposed several restrictive provisions of the bill as originally offered, particularly those clauses which would require publicity for all discussions and votes of bureau or conference members.

"That railroad carriers should be allowed to run free in unrestrained rate competition is unthinkable," he told the committee, but "the rate bureau plan, where the right of independent action is preserved, does not impair wholesome competition." As the railroads' rate-making machinery now functions, Mr. Scott declared, shippers "enjoy a system of devices which while safeguarding the benefits of railroad competition afford checks at every step from the conception of a rate to its effective date, which not only tend to prevent destructive railroad competition but also aid in preventing the disruption of the rate structure upon which the industry of the country is founded."

H. A. Hollopeter, traffic director of the Indiana State Chamber of Commerce, was generally in accord with Mr. Eastman's statement with respect to the propriety and desirability from the standpoint of the shippers of having rate adjustments made through cooperative action. He differed with Mr. Eastman, however, on the question of the need for legislation, holding that there is no such need. "All the necessary and proper cooperative action with respect to the fixation of transportation rates can be carried on without violating the principles of the Sherman Anti-Trust Law," Mr. Hollopeter said, adding "we feel that the guarantees which are in the Sherman Anti-Trust Law should continue without abatement to apply in connection with the activities of these committees in any instance where they do overstep such proper and reasonable bounds." The remainder of Mr. Hollopeter's statement was designed to rebut interterritorial freight rate testimony which had been given previously by representatives of the Tennessee Valley Authority.

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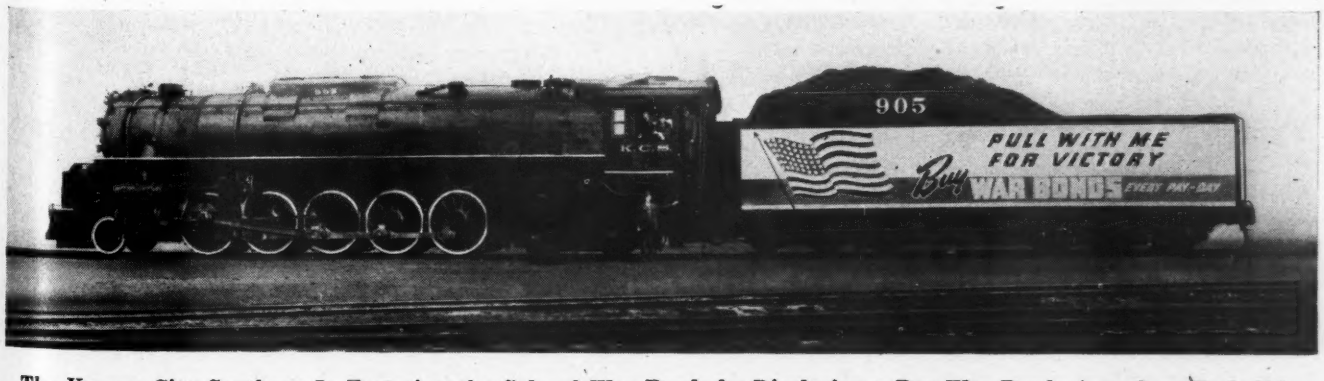


The Kansas City Southern Is Fostering the Sale of War Bonds by Displaying a Buy War Bonds Appeal on Each Side of the Tender of Its Line and Switching Locomotives

Whitney on Stand in Op Wage Case

Trainmen's president criticizes Congress, OPA and other federal agencies, yields little information under cross-examination

HEARINGS by a three-man "emergency board" on the demand of the transportation unions for a $3 per "day" wage increase entered their third week at New York on June 21. Earlier sessions have been reported in the two preceding issues of *Railway Age*.

On the ninth day of the hearing, W. C. Shipley, passenger brakeman-ticket-collector on the Maryland division of the Pennsylvania Railroad, spoke of the increased responsibilities of his work, citing the upswing in passenger travel. Where formerly 450 persons were carried per train, today a train may haul between 800 or 900. Weekends and holidays there are frequently as many as 1,500 to 2,000 in the coaches. Because of these overcrowded conditions, it is now virtually impossible for him "to find a convenient spot for compiling records and reports undisturbed." Witness Shipley remarked that he leaves Washington on his run at 10 a. m., completing a round-trip from New York at 10:25 p. m., averaging 13 trips per month. His earnings in January of this year were $341 (with 161 straight-time hours paid for, no overtime and 18 hours of constructive allowances). The usual layover at the home terminal is about 35 hours, with 4 hours at the New York end of the run.

Thomas C. Griffin, yard helper on the New York Central, called attention to the risks involved in yard work, and outlined the duties of men in the yard. These men, whose job it is nowadays to handle tanks, jeeps, armored cars, guns, telegraph poles, piling and machinery, "are fully aware of the need for handling them promptly." In 1920 a switchman received $6.34 for an eight-hour day; today he receives $7.82. "We think we are underpaid," said the witness, who, when he is engaged in brotherhood work, receives $14 daily for representing 400 men in his yard.

Alexander F. Whitney, president of the Brotherhood of Railroad Trainmen, said that while his testimony "will not deal generally with wages," it would deal with "many of the factors that enter into the wage situation upon the American railroads."

Whitney Issues Comprehensive Denunciations

At the outset he denounced war-time emergency executive orders and administrative directives. "It seems they have been doing it with mirrors. Now you see one, now two, now you see it, now you don't," the witness remarked. "As I pondered the texts of these laws and orders through the emergency price-control act of 1943 down to the final chapter written by Economic Stabilization Director Byrnes on May 12," said Mr. Whitney, "I could well imagine that they might have been designed as cynical devices of rhetoric to fool the people, to deceive both the workers and employers and thus keep the public of this beleaguered nation in a constant state of puzzlement and confusion, while the cost of living increases and while the criminally legal and the legally criminal rob them."

Vinson Stays Non-Ops Raise

Economic Stabilization Director Vinson on June 22 issued an order to prevent the recommended eight-cents-per-hour increase in wages for non-operating railroad employees from becoming effective. In the absence of the order the increase would have become effective on June 23, under the provisions of President Roosevelt's February 4 executive order which stipulates that emergency-board recommendations, except as the Economic Stabilization Director may direct, "shall, upon the expiration of 30 days after the report is filed with the President, become effective."

The Vinson order followed upon the memorandum filed with him by the regional railroad conference committees, as noted in the *Railway Age* of June 19, page 1236. It authorizes the emergency board to reconsider the case and make a revised recommendation "in the light of the memorandum opinion which will be filed by me within the next 10 days."

The emergency board report involved was reviewed in the *Railway Age* of May 29, page 1095. Members of the board were Chairman I. L. Sharfman, professor of economics at the University of Michigan; Walter T. Fisher, Chicago attorney; and John A. Fitch of the New York School of Social Research. Since the issuance of the report, the labor organizations have obtained President Roosevelt's intervention in an undertaking to set the stage for further conferences on the proposition of paying time-and-one-half rates for the last eight hours of the non-ops 48-hour week.

Expressing approval of the President's plea for "equality of sacrifice"—"we are determined that the sacrifices of one shall not be by the profit of another"—he cautioned the Board to "weigh this carefully." He was "beginning to doubt," he said, "the ability of top functionaries to put this into practice." "There is no more appropriate occasion for the President and the Director of Economic Stabilization to get information as to how their orders and directives are working out in practice than in a proceeding like this."

He stated he would give facts revealing the relationship between this wage case and the general stabilization program, adding that "We certainly don't want to see an emergency board decision favorable to us overruled in Washington on evidence obtained ex parte in a closed-door conference with some industry committee—a procedure now widely in vogue in our war agencies."

Voicing no objection to investments in railroad or industrial securities, he asserted, however, "that greater safeguards should be thrown around investments made." Arguing that the funded debt of railroads was dangerously high and represented over 45 per cent of their cap-

italization, he pointed to such companies as International Harvester, Chrysler, Ford, General Motors and Pullman, who have no funded debt, to Anaconda with a 7.5 per cent and to U. S. Steel with 15.9 per cent funded debt. Investors are entitled to a return on their money, he said, if there is anything left after operating expenses, payment of fair wages, debt reduction, and the like.

Time Away from Home Terminals

In 1920, the witness pointed out, there were about 2,050,000 employees in the railroad industry, and despite the fact that the carriers are now doing the biggest business in their history, railroads now employ about 700,000 less workers than in 1920. This is possible because of the methods used to secure more service from employees. Said Mr. Whitney, "a train crew of five men will move as much tonnage today as two crews of five men each could move 20 years ago." He would suggest, though, certain improvements, such as avoiding long layovers of crews at away-from-home terminals, and minimizing delays getting into and out of yards. Observing that "10 hours are all required for a crew to be legally rested and available for further service," the witness cited instances where road crews had been held at away-from-home terminals from 4 to 30 hours in excess of the 10 hour rest, and described this "forced absenteeism" as a "crime against our people in time of war when manpower is so valuable." Some of these men have from $30 to $40 away-from-home expense each month, he asserted.

Mr. Whitney charged the Office of Price Administration with failure to halt inflation and said its policy has tended to depreciate the worker's dollar. "The question is, has the OPA made any real attempt to do a job of price control? Evidence answers that it has not. From the day the decision on general maximum price regulation was made in the spring of 1942, the OPA has evidenced no intention of controlling prices or stopping inflation. It has given the American consumer inflation control—and there is an immense difference between inflation control and price control."

Accusing Congress, and chiefly the House, of "spreading more disunity than all the fifth columnists so far arrested and sent to prison," Mr. Whitney remarked that these same "super-patriots who have been smearing labor for absenteeism are getting ready to take a two months' vacation this summer."

Quotes Thurman Arnold Against Railroads

Observing that railroad earnings this year will "greatly exceed '42," the witness asserted that, while there will be about 45 per cent increase in dividends this year, that 35 Class I roads have reduced their indebtedness only 3.6 per cent. "These facts constitute a strong case of circumstantial evidence that the railroad industry has no fixed intention of applying its war gains to the security and improvement of rail transportation service after the war." Citing the $1,480,940,760 net operating income after taxes in 1942 for Class I roads, he remarked, "I think you will agree with me that a reasonable fraction of this would be just as socially useful in the hands of railroad employees, who can buy bonds as well as railroad bankers can sell them." The attitude of the railroads in respect to war profits, he said, is "about as reasonable as a hungry alley cat with a hunk of raw meat."

Mr. Whitney drew a picture of a gigantic railroad monopoly being formed, which would determine the location of industry, the sources from which raw materials would be drawn, and which possibly would even shift populations. He based this accusation on a memorandum prepared by the Anti-Trust Division of the Department of Justice "which was suppressed last September but which recently came to light through the efforts of the Brotherhood of Railroad Trainmen." The memorandum was written by Federal Judge Thurman Arnold while he was still head of the anti-trust division. On the grounds that to proceed with the indictments would have injured the transportation system during the war, proceedings against the common carriers by the anti-trust division were "squelched and suppressed by Attorney General Francis Biddle after the War and Navy Departments and the Office of Defense Transportation went to bat for the carriers," Witness Whitney declared.

Counsel Aronson for the carriers objected to the admission of evidence of investigations not ending in indictments, and asked "what if anything will this have to do with the propriety or impropriety of wage increase?" Counsel Flynn for the brotherhoods said this would show "that the lily is not as white perhaps as it is painted, so far as carriers are concerned," and added they had the "right to show the railroads are making every effort to produce monopolies" which would not be to the best interest of the employees. Judge Stacy said the evidence might be admitted and it would be up to the Board to decide on its relevancy.

Eastman Disputed the Arnold Memorandum

According to Mr. Whitney, the Transportation Association of America had announced an intention of seeking five objectives: (1) Congressional declaration of policy in favor of integrated transportation systems; (2) the revision of the Transportation Act of 1940 with respect to pooling and mergers; (3) repeal of the Sherman act as it applies to transportation companies; (4) repeal of the Panama Canal act to the extent that it prevents common ownership of rail and water carriers; and (5) modification of all other statutory provisions which have the effect of encouraging "unnecessary and destructive competition."

Mr. Aronson offered for the record a statement by Joseph B. Eastman, director of the Office of Defense Transportation, made before the Senate Interstate Commerce Committee on June 15 which referred to the memorandum cited by Mr. Whitney "as a collection of partisan and extreme conclusions and inferences from factual premises which were, to a considerable extent, incomplete and inaccurate."

Mr. Flynn asked Mr. Aronson to remember that Mr. Eastman was one of the gentlemen who had requested this grand jury be stopped.

Mr. Whitney said that railroads always plead inabilty to pay, and he told the Board "we as railroad workers must depend on the wisdom of tribunals such as yours in order to secure a semblance of justice in wage matters. For this reason," he went on, "we think it pertinent at this time in the interest of railroad workers and people of this nation that some one exposed this octopus that is being built around the Association of American Railroads and its branches."

Mr. Whitney, after some comment by Board members, said this proceeding "is not a contest of personalities." Instead it is a "contest where 350,000 employees are trying to secure wages way past overdue from an industry that has been prosperous because of this war, and the industry is here trying to stop our efforts. If we are not permitted to enter into an argument revealing

all the ramifications entering into this industry, then I feel we will not make a case."

Are B. of R. T. Clerks Paid on "Mileage Basis"?

At the close of his testimony, Mr. Whitney expressed a desire to introduce evidence of the salaries paid to employees of the Grand Lodge of the Brotherhood. Mr. Aronson interjected that he didn't see "its relevancy," since workers listed were clerks, stenographers, bookkeepers, etc., and he didn't "understand the comparability of work done by these gentlemen with those who have already taken the stand." Judge Stacy suggested that Mr. Flynn show the figures to his statistical expert, Mr. Oliver, to determine if he could find some comparable basis between the brotherhood salaries and those of railway workers. Mr. Aronson wondered if the figures were computed on the "mileage basis or the hourly basis."

In cross-examination, Mr. Aronson pointed out that the witness had "castigated" Congress, the Transportation Association of America, OPA, railroad management, and wondered if the witness could give a list of those for whom he might have a "kind word."

Mr. Whitney replied it had not been his "intention to unfairly criticize any individual or governmental department." He said he was only trying to "paint the facts" as they affected "railroad labor," and added he had "never been inclined to do much whitewashing. If we hew to the facts in this matter we're better off."

Said Mr. Aronson, "I'm going to try to get you to hew a little bit to the facts." He inquired if there were any governmental bodies "connected with this case" for whom the witness might have a good word.

Mr. Whitney replied, "That is irrelevant and I refuse to answer."

Mr. Aronson attempted to determine which executive orders or which directives the witness specifically had in mind in his criticism. He asked if it were the Stabilization Act of October 2, 1942, and, following a verbal exchange concerning the content of the Act, Mr. Whitney made the statement: "I have no desire to be helpful to you in undertaking to set out my testimony."

Mr. Aronson then mentioned the President's Executive Order of April 8, to learn if it was this to which Mr. Whitney had alluded. Mr. Whitney said he meant it "about all those orders." Still attempting to elicit a specific answer, Mr. Aronson inquired about the "President's hold-the-line order," and Mr. Whitney said, "I gave you an answer. That's as concrete as I am going to make it."

Mr. Aronson asked if he were correct "that a strike was ordered to take effect December 7, 1941." Mr. Whitney said, "I think you have in mind Pearl Harbor." Mr. Aronson then read into the record a letter written by Mr. Whitney in which it was mentioned that a date had been set for a strike.

In his testimony Mr. Whitney had said he felt the Board "should not be too literal" in making a decision in this case. Mr. Aronson asked if it were the witness' view that the board might "decree its own policy or that it must accept the one laid down by the President and Congress of the United States." Following another exchange of remarks, Mr. Whitney observed, "I think you are asking some very sarcastic and impertinent questions." And added, "I am a layman. I am not here to be ridden bare-back."

Mr. Aronson wondered if the witness felt "wages should have no relationship to the ability or inability of carriers to pay." The witness said, "I certainly do. I feel cultural wages should be paid, and if the carrier is not in a position to pay, it ought to go out of business."

"When they try to go out of business with branch lines which are unprofitable, you oppose that, don't you?" questioned the railroad counsel.

Taking up the question of railroad earnings, Mr. Aronson inquired, "I want to know whether it is your position that the current earnings of railroads have anything to do with the hearing before this board?" Witness Whitney answered that "these men are entitled to a wage increase no matter what the earnings are."

Mr. Aronson asked for the witness' own statement concerning the amount wages have increased since 1941. To this the reply was: "That was introduced by our economist. If you want to recall him you can."

Counsel then brought out that there was a $330,000,000 approximate wage increase in 1942 over 1941. He asked the witness if he then considered it an "improper" proportion that, with such a wage increase, dividends should have been increased $9,000,000. The witness replied he had "heretofore testified that railroads should reduce their debt structure." Mr. Aronson then wondered if, in the light of net operating income for 1942, the witness considered $9 million to represent "an orgy of dividend distribution."

Counsel next asked if the witness concurred with Joseph B. Eastman's statement "that one of the greatest dangers we face is the danger of inflation." Mr. Whitney replied: "We already have it."

"You said by the end of 1942 OPA was floundering. You referred to a new administrator taking office. Was it Prentiss Brown?"

Witness answered: "Couldn't be anybody else."

Mr. Aronson then inquired: "To whom was he pledged to appease the speculators and profiteers," as the witness had suggested in his testimony.

Accuses Prentiss Brown of "Appeasing" Profiteers

"I stated," said Mr. Whitney, "that under the regime of Henderson, followed by Prentiss Brown, the question of reducing prices or stabilizing prices was a myth." And then added he had referred to the statement of Mr. Brown when he took office "that he wouldn't interfere with profits." Mr. Whitney continued: "I doubted very much if he would be strong enough to carry out fundamental principles that the President had in mind."

Mr. Aronson pressed the question: "To whom would Senator Brown, in your view, pledge himself to appease the speculators and profiteers?"

The witness stated, "I don't believe he pledged it to the President."

"To the people of the United States?" suggested the railroad counsel.

"The people of the United States are not interested in having those things done. There is a Wall Street crowd that might want it," offered Mr. Whitney. "That's what happened whether he pledged himself or not. Working people throughout the nation are chafing under the failure of OPA to do the job."

The witness then said heatedly: "I say willfully and maliciously and with malice aforethought that I will not remove the dot from an *i* or the cross from a *t* of any part of my testimony."

Counsel Aronson then pointed out the witness was charging a government official with "gross misconduct" and wondered if he could "back up those statements."

Mr. Whitney replied: "You aren't entitled to anything

unless you represent the government. I understand you are here representing Wall Street."

"What's the use? That's all," pronounced Mr. Aronson.

Board Member Swacker inquired if most employees when they go to work have a choice of what they want to go into. The reply was that "usually when he makes out his application for employment, he specifies the class of service." Mr. Swacker then asked Mr. Whitney how he justified the men in the yard with less pay who could have made more money in less time by going into road service. The witness remarked that the "service is somewhat more regular in the yard, whereas in road service men are away from home two-thirds to three-fourths of the time," under heavy expense and with irregular hours.

Professor Sharfman questioned the point the witness had made about more time being lost in away-from-home terminals during slack business than when it is heavy. The Board Member asked how Mr. Whitney could explain his statements about excessive away-from-home terminal delays, when it "would appear to be to the interest of the employer not to have so much time lost."

"According to the information we have received," asserted Mr. Whitney, "it is due to the desire of the carriers to load down each locomotive to the last pound that it can haul. We have letters in the files showing that crews were held several hours merely for one or two cars to make up the full tonnage. It seems to be due to the desire of the carriers to increase their earning ability."

Does B. of R. T. Object to Conserving Equipment?

Professor Sharfman then asked if it isn't "desirable to the standpoint of public interest that full tonnage be hauled," and further, "where this problem arises it is also to the interest of the war effort that we utilize what we have as completely as possible."

The witness insisted it "would be better to move a train over the road a few tons light, because it will move quicker" and will release the crew for further service.

Professor Sharfman remarked that "doubtless those in authority will have different opinions as to the best way to do the job. But would you say that loss in delays at away-from-home terminals is due to some desperate plan of the carriers to exploit workers?"

The witness reasoned "they don't do that to purposely exploit the workers. They hold them because they haven't got full tonnage."

Mr. Aronson interposed: "How long since you have been engaged in active railroad operations, Mr. Whitney?"

The witness asked, "What is the purpose of the question? To embarrass someone?"

"Will you answer it?" persisted Mr. Aronson.

"I will not," announced the witness. "It's nobody's business. If you want me to be helpful to the Board I will. If the Board wants to know I'll answer it."

Mr. Aronson reminded the witness he had a "lawyer here who will object if my questions are improper. I haven't heard him," he said. He went on to observe that he "would expect no objection to that question. Here is a witness speaking of delays which are a terrific waste of manpower. Aren't we entitled to know if his opinions are based on any actual experience?"

Counsel Flynn for the brotherhoods next called G. L. Jennings, with 26 years' seniority on the Southern Pacific as yardman. The witness said that, with 24 Army and Navy establishments on his line, the S. P. yardmen are heavily taxed to keep these in operation, and added there is "plenty of proof we have accomplished the desired results." He said a man had to have a "talent" for railroading and that it was easier to train a man for a defense job or one in a shipyard than it was to acclimate him to a railroad. Mr. Jennings thought it "penny-wise and pound-foolish" for railroads to lose men to shipyards rather than to step up their pay.

He read two newspaper advertisements into the record. One offered $214 per month to a young girl to learn welding in a shipyard. In the same paper appeared an S. P. advertisement for an experienced man at a wage of $137.50. "If we fail to obtain a fair wage increase," said Mr. Jennings, "we will be unable to persuade our members to continue with the railroads." His own wage, he said, is $7.82 a day, and $46.92 for a 6-day week. The witness had mentioned the payless 30-day student period required of a yardman. Mr. Aronson wondered if Mr. Jennings could say what study might be expected of a stenographer before she could qualify for a position with pay. The witness disclosed he has been "married 35 years," and he "doesn't know anything about stenographers."

A. J. Benoit, freight conductor on the New York, New Haven & Hartford, testified that he had 26 years' 11 months' seniority as a freight brakeman and 24 years' 9 months' seniority as a freight conductor. "Over 15 years of this time," he said, "have been on the spare board." In May, Mr. Benoit's run was from Hartford to Maybrook, a distance of 153 miles. For this he received $11.96 per trip, and $349.30 for the month. Approximate time worked daily was 8 to 9½ hours. He had about 8 hours at home every other day.

O. E. Hart, in yard service for the past 20 years, one-time fireman and now train director of the New Orleans Public Belt Railroad, said that his "is strictly an industrial switching road." Chairman of the general committee of B. of R. T., Mr. Hart declared he "doesn't think there is a more loyal group in the United States than railroad employees. We are going to continue to do our part regardless of the outcome of wages."

$361 a Month an Unsatisfactory Wage

Francis S. Crutchley, who entered service as a fireman on the Great Northern in 1909, said the "most important thing to remember in the operation of an electric locomotive is that your first mistake is the last one." Local chairman of the Brotherhood of Locomotive Firemen & Enginemen, Mr. Crutchley asserted that the men he represents, "realizing they are working in No. 1 war effort group," are not satisfied with their present wages. The witness' salary in January (which is the last month he regularly worked) was $361.

Ivan W. Scheihing, 38-year-old fireman on the Missouri Pacific, and in service since 1926, is now assigned to passenger runs of 169 miles. Earnings are $23.74 for each round-trip, and with 13 such trips normally, his monthly earnings total $308.62. Mr. Scheihing reported firemen on his division to be "vigorously insisting on an increase in pay." He said many employees are leaving the service to work in war industries. Maximum mileage permitted is 4800, but since the increase of business the railroad will occasionally ask regular hands to make an extra trip. Cross-examination disclosed he is paid for an extra hour, in which to check over tools, etc., before going out on the run. Board Member Sharfman remarked: "You are paid that one hour, even though your subsequent 100 miles is done in three hours." The witness concurred.

Edward Anderson, locomotive fireman for the North-

ern Pacific, entered service in 1916. He was furloughed from 1931 to 1937. Because his seniority places him well down the list for promotion, he stated he has "little hope for the future." In January, for 4,472 miles run, he received $323.72, for February with a mileage of 3,580 he received $271.10. He is paid $7.34 and $7.43 for a basic day, depending on the type of locomotive to which he is assigned. Mr. Anderson stated that the 76 cents increase per basic day the men received in 1941 is far short of the increased away-from-home terminal expense, which he estimates to be up 50 per cent.

Jerome X. Dean, locomotive fireman since 1925 on the Chicago, Burlington & Quincy, receives $6.83 per basic day in yard service. His monthly earnings are approximately $191. Study classes during the year absorb about 27 8-hr. days, which time is not paid for. Mr. Swacker inquired if Mr. Dean had chosen yard rather than road service. The witness replied firemen are employed for yard service only in Chicago.

William J. Anderson, who has been employed as a locomotive fireman since 1926, gets $6.83 per 8-hr. day from the Belt Railway of Chicago, where he works as an inside hostler. He said that there is little inducement for older employees to bid for this type of service because of the limited pay. The working day is from 9 to 11 hours, the time varying. While his seniority rights permit him to hold an assignment in passenger service, he observed it would not take much of a decline in business before he would be barred from that service. In March he was off three days, received $271.29 in wages for 224 straight-time hours and 51 hours of overtime.

James H. Chase, locomotive fireman in short turnaround service on the Boston & Maine, entered railway service in 1912, and qualified as an engineer in 1923. He receives $6.45 per 100 miles, and earnings from Monday through Friday amount to $8.73 daily, and $6.84 on Saturday. He stated his average weekly earnings are $50.53. As a fireman in March he received $172.42, after deductions. In February as an engineer, he got $193.22.

Arthur Williamson, hostler's helper on the Denver & Rio Grande Western, entered service as a laborer in 1907. His basic daily wage is $6.27 for eight hours, receiving $188.10 if he works 30 days. Mr. Williamson mentioned there is no way in which he can increase his earnings, his seniority rights restricting him so far as promotion is concerned. The only way he can earn more money, he said, is by a wage increase. There are a number of war industries in his vicinity where wages are more attractive.

Harry C. Barnett, fireman since 1922 on the Bessemer & Lake Erie, observed that although he has been with the railroad for more than 20 years, and is a qualified engineer, he has never been called for that service. This year is the first in many when he has not been furloughed for about 4½ months. When navigation closes on the Great Lakes large numbers of the B. & L. E. men are laid off, and those remaining "suffer reduction in earning power." Recently he was disciplined by being laid off two days without pay for not maintaining the proper water level in the boiler, although no damage was done to the locomotive. He receives $7.87 per 100 miles, and on his particular run, $20.15 for a round-trip. He estimates his away-from-home expense as about $2 per trip, and the trips total 10 to 12 each month. His 17-year-old son works as a welder for $75 to $80 a week; this he pointed out, is "50 per cent more than I get from the railroad after 20 years." Wm. O. Parks, a passenger conductor on the Santa Fe, said: "I am not here for the purpose of criticizing the railroad company or any officers on the property of which I am employed." He hoped to show the Board why employees feel entitled to a wage adjustment, he said. In 1909 he entered service as a brakeman, becoming a conductor in 1914. He is local chairman of his lodge. Now assigned as a regular passenger conductor from Oakland to Bakersfield and return, he receives $17.40 for 313 miles and $34.80 for the round-trip. Ordinarily he makes 10 round-trips each month, and is away from home approximately 40 hours for each round-trip. To support his view that increased business on the railroad warranted higher wages, he cited figures from his own train's run. In January, 1942, they carried 1,294 passengers, and in 1943, 2,595. In February, 1942, 2,105 passengers were carried and in 1943, 3,729. March, April and May figures for this year "more than doubled" those of 1942, he said.

* * * *

Officers of National Railways of Mexico Visit Missouri Pacific Shops

Shop methods and practices are being studied by 11 mechanical department supervisory officers of the National of Mexico at the Missouri Pacific's car and locomotive shops at Sedalia, Mo. Photo shows the delegation at St. Louis, en route to Sedalia, conferring with O. A. Garber, chief mechanical officer of the M. P. (seated). At the extreme left is D. R. Rodgers, assistant to Mr. Garber; next (face partly hidden), R. C. DeZayas, Jr., executive assistant to the U. S. Railroad Mission to Mexico; fourth from right, R. Kling, principal transportation officer of the mission.

Scanty RR Materials Worry Gross

Says one key road already "stumbles" and "when railroads begin to falter, they falter progressively"—WPB "not giving roads as favorable a break" as they need

ALLOCATION authorities at the War Production Board "must have in mind that they cannot stretch the railroads too far," according to Major General C. P. Gross, chief of the Army's Transportation Corps, who does not think that the carriers have thus far "been given as favorable a break as they should have." General Gross made these assertions, following through with a warning that "when the railroads begin to falter, they falter progressively," in the course of now-released testimony given early this month before a House appropriations subcommittee which considered the Military Establishment Appropriation Bill for fiscal '44.

He was responding to a question wherein Representative Starnes, Democrat of Alabama, had asked if in the general's opinion the WPB "should give more sympathetic consideration to any application for priorities from the railroad systems of the country for replacement, repair, or maintenance of the railroads in order to make sure that an effective job is being done." The response, General Gross said, applied "particularly in connection with locomotives"; but he later said that there are in the rail situation "indications that the need is coming, and close, to make it almost a first priority."

Not Ordering Enough Steam Locomotives

Commenting on the condition of railroad equipment, General Gross said "there is one railroad that is stumbling right now It is beginning to have congestion. It is a sore spot." The general did not name the road, but his testimony carried the implication that it was in the West. The road, he went on, "will say" it lacks Diesel locomotives; but the general thinks there "has been an indisposition to take steam locomotives," with the result that railroads "have not put as many orders on the books for the kind [of locomotives] that they can get as I think they should."

"We have not stretched the use of the Pacific railroads as yet," General Gross continued. "When we go into the Pacific war we will throw a whole lot more onto those railroads than they now have. The Pacific coast is fed, from an expert's standpoint, by a rather tenuous rail system. . . . I believe there is a great danger because of lack of equipment. It may be that if this railroad finds itself in real and crying need for Diesels, the Office of Defense Transportation would take some away from other railroads and shoot them out." Nevertheless, he added, "there is not the margin of safety." Personally, General Gross "would like to see a greater factor of safety"—so he told Representative Powers, Republican of New Jersey, who had asked if anything were being done "to see that the entire rail system does not collapse, because if it goes it will go quickly."

Mr. Powers had heard it said that "35 per cent of the rail between New York and Washington should be replaced right now." The general had not heard the statement made. He is certain that the New York-Washington lines "expect to be able to maintain their track"; although he does know "that one road is rougher, rides rougher, right now than ever before." With respect to the freight car situation, General Gross told Mr. Powers that the surplus is "rather low." The railroads fear most "a lack of gondolas and flat cars," although "I do not think they put this in the same category as the problem of locomotives and renewal of rail."

Federal Operation Would Be "Disaster"

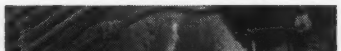
Meanwhile, General Gross had also told the subcommittee that the railroads have been doing a "superlative" job in meeting the requirements of the War Department. He selected that word from Representative Starnes' question which had asked him to characterize the performance as "good," "excellent," or "superlative." Mr. Starnes then suggested that the general saw no reason why the government should take over the carriers.

The general replied with an expression of his view that government operation "would be a disaster." The cooperation the Army is receiving from the railroads "could not be any better."

Responding to Mr. Starnes' next question, calling for a comparison of the present situation with that of World War I, General Gross had this to say: "There is no comparison. Both the railroads and the War Department have learned lessons from the first World War and they have applied what they learned to the present situation. I do not think that any lessons learned from the first World War have been carried into this war any better than the lessons learned in connection with rail transportation in the former war. One of the reasons why these lessons have been carried through is because of the interest of the railroads themselves. They were so hurt and so crippled in the last war and from the lessons they learned they have become organized and they have educated and indoctrinated their whole establishment and, too, they have helped to indoctrinate the Army. That is one of the lessons that has been spread throughout the Army—at least among the top officers of the Army. It has paid wonderful dividends."

General Gross also presented a brief statement showing Army use of the inland waterways. "During the first five months of 1943," the statement said, "the Army routed a total of 200,000 short tons of freight over inland waterways. This represented the equivalent of 7,500 railroad carloads. Included in the above figures are barge shipments on the country's rivers, as well as Great Lakes and coastwise freight. Freight shipped by the Army on inland waterways is generally of a kind that is going into storage and does not require the expeditious handling necessary on shipments that are destined for overseas theaters and for troops in training in this country."

American Military Railroaders in North Africa

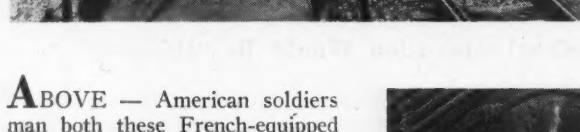


ABOVE — American soldiers man both these French-equipped trains at a junction point in North Africa. INSET RIGHT: Sgt. H. Harris of Hubbard, O., an Army Casey Jones, lubricates his African iron horse. BELOW: These military railroaders of the Fifth American Army are wondering if the old girl pulling them is going to make the grade.

RIGHT, *top to bottom:* (1) Military train rolling easily over flat desert country; (2) All-steel African flat car converted by shelter tents into a G. I. Pullman; (3) Four-wheeler flat car carries a half-track and four military passengers; (4) Arab children at an African station are relieving American soldiers of their chocolate rations.

All photos are by Sgt. Joseph Hansen of the Army Signal Corps.

Equipment used on the railways of North Africa, according to a report by Sergeant Fred W. Welty, includes 1895 "underslung" French engines, 1918 "General Pershing" models, and 1942 Army locomotives. Cars are, mostly, of the "40 and 8" type. There are no coal chutes; coaling is a hand job. There are no headlights; night operations are performed in total blackout.



New Bridge Closes Gap in All-Rail Banana Route

AN ALL-RAIL route for the bananas and coffee of Central America has been opened by the construction of a bridge over the Suchiate river between Mexico and Guatemala at Ayutla, Guat., connecting the standard-gage National Railways of Mexico with the International Railways of Central America, serving Guatemala and El Salvador with 794 miles of line of 3-ft. gage. Earlier reports on this project appeared in the *Railway Age* of August 29, 1942, page 352, and November 28, page 885.

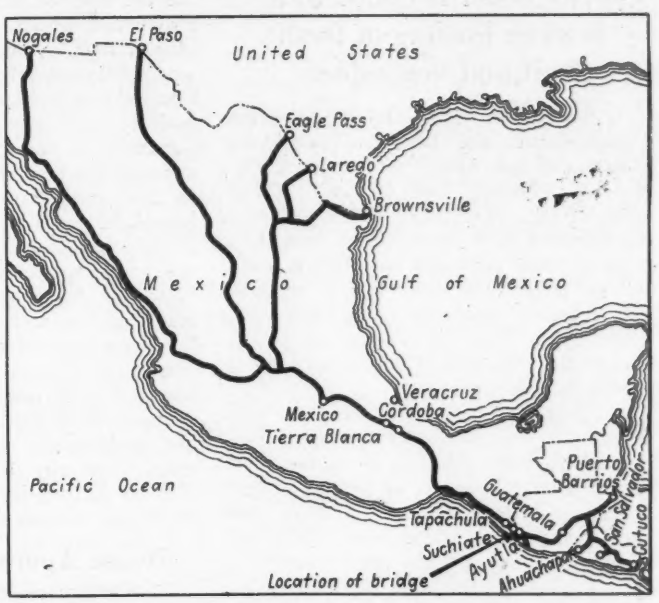
Since the participation of the United States in World War II, boat movements to and from Central America have been greatly restricted because of the great need for bottoms for military use and also because of the submarine menace. As a result, these countries have been unable to ship more than a fraction of their coffee, bananas, sesame seed, castor beans and other agricultural products to the United States and other countries. Without transportation, large amounts of these products have rotted on the plantations and wharves, although all of them are needed in the United States. Likewise the Central American states have been forced to do without some of the machinery, textiles, clothing, medicines, paper stock and a variety of other manufactured items which they would normally purchase from the United States.

When this condition developed, shipments from Central America were routed over the narrow-gage lines of the International Railways of Central America to the northwest terminus at Ayutla and were then transferred to oxcarts, hauled to the Suchiate river, poled across this wide but shallow stream in small boats, transferred again to oxcarts and hauled to Suchiate, the southern terminus of the National Railways of Mexico. Because of these primitive methods of transfer, this narrow gap between the two lines limited the traffic in either direction to about 40 tons daily.

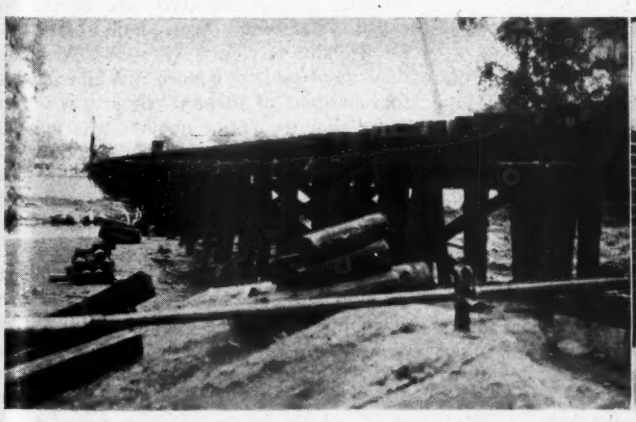
To correct this situation, the National Railways of Mexico extended its line to Ayutla last fall. This extension included a pile trestle with open-deck I-beam spans, about ½-mile long over the Suchiate river, which was rushed to completion in three months. At Ayutla a transfer platform has been built and a power derrick installed for the transfer of freight between the two roads. Suchiate and Ayutla are towns of about 200 population and formerly very little business was handled by the National Railways of Mexico south of Tapachula, Chis., a town of about 26,000, 25 miles north of Suchiate.

The usual route of freight moving north from Suchiate is via Tierra Blanca, and Cordoba, to Mexico City and thence north by one of several routes to the United States at Laredo, Tex., El Paso, Eagle Pass, Brownsville or Nogales, Ariz. Passenger traffic is routed via Tierra Blanca and Vera Cruz, to Mexico City. The time required for freight to move from Suchiate to Laredo has been about 15 to 20 days. The maximum length of freight trains on the Suchiate line is about 15 cars.

South of Tierra Blanca the track is laid mostly with light rail with dirt ballast. Most passing tracks on this line were too short and too far apart. Speeds of 20 miles per hour were unsafe in many sections, while south of Tapachula in some places speeds in excess of 8 miles per hour were unsafe. These conditions are rapidly being improved on this route and on other key lines of the National Railways of Mexico under an arrangement by which the United States has agreed to finance rehabilitation of key lines and has sent the United States Railway Mission of Mexico, composed of railroad experts from this country, to aid in rehabilitation. Eventually the time from Suchiate to Laredo may be reduced to 5 or 6 days.



Map Showing the Location of the New Bridge and Principal Routes for Rail Freight from Central America to the United States



LEFT ABOVE—The New Bridge Over the Suchiate River—RIGHT—The New Transfer Platform at Ayutla

Railroads-in-War News

Refrigerator Car Use Is Modified

Service order is aimed to get heavier loading of fresh fruit and vegetables

At the request of the Office of Defense Transportation, the Interstate Commerce Commission has issued its Service Order No. 133, effective June 19 until further order of the commission, which prohibits the shipment of fresh or green vegetables in refrigerator cars with both bunker icing and top icing. The order further requires that railroads shall not move such cars, when top or body ice is used, unless the bunkers are collapsed, if the car is equipped with collapsible bunkers.

The ODT explained that the order was designed to stop a recently developed practice of vegetable shippers of having their cars iced in the bunkers as well as around the crates, which resulted in using one extra refrigerator car for every five loaded, so depleting an already short supply of such equipment, and also in draining ice supplies that have become "alarmingly short" in some parts of the country.

The provisions of the commission's Service Order No. 130, reported in *Railway Age* of June 19, page 1233, have been modified by Amendment 1 to that order, effective June 19, limiting its application to refrigerator cars loaded with watermelons in Arizona or California and destined to points in those states.

The commission's Service Order No. 132, effective June 18, put into effect the recommendation of the War Food Administration that refrigerator cars equipped with half-stage icing grates should be iced only in the sections of the bunkers above such grates. Railroads are not required to furnish cars equipped with such grates, however, unless they can do so without additional switching service above that normally required. The order points out that at present about one-third of all refrigerator cars are fitted with half-stage grates. Tariffs putting this revised icing practice into effect on 5 days' notice before are required to be filed July 5.

Previous restrictions on the shipment of potatoes from certain counties in Florida to those for which a permit from the food administrator has been obtained by the shipper were removed by the commission's Service Order No. 127-B, effective June 23. Restrictions on shipments from various other localities remain in force.

ODT Truck Fuel Restrictions

The Office of Defense Transportation announced June 19 a revision of the list of industries to be given preferential treatment in the allotment of gasoline to truck operators in the northeastern states where the "stretch out" of commercial fuel rations is in effect. This revision applies to the list certified to the ODT by the War Production Board, as outlined in *Railway Age* of June 12, page 1092, and affects railway operations only in that the transportation industry set-up has been consolidated, with an A-1 priority rating, while transportation of currency and negotiable instruments, a new classification, is assigned an A-3 rating, as is transportation of household goods by common carrier.

This announcement followed an ODT order of June 16 further restricting retail deliveries by truck in the northeastern states, in line with the program to curtail by 20 per cent the use of gasoline by commercial vehicles in that area. The restrictions take the form of Amendment 3A to General Order ODT 17, and set minimum size and weight limitations on packages retail firms may deliver by truck in addition to the trip-frequency and commodity limitations already in effect.

House Approves ODT Funds

The House of Representatives on June 18 passed the National War Agencies Appropriation Bill carrying $14,650,000 for the Office of Defense Transportation for the fiscal year ending June 30, 1944.

Multiple-Unit Cars Exempt from ODT Order No. 24

Use in urban or suburban service of passenger trains made up of electrically-propelled, non-interchangeable equipment has been exempted by the Office of Defense Transportation from the provisions of General Order No. 24 forbidding operations of special trains or extra sections. The exemption came in General Permit ODT 24-7 issued June 19, the announcement pointing out that the equipment involved "could not be used in general railway operations and was therefore not available for troop or regular train services."

"No purpose was served," the announcement went on, "by holding this type of equipment under the restrictions of the general order. Accordingly, it was decided to permit the affected carriers to operate, for any purpose, extra trains or extra sections using solely the non-interchangeable electric equipment, so as to get the maximum utilization of that equipment. In actual practice, the general permit will have the effect of enabling those railroads which operate non-interchangeable electric passenger equipment to run additional trains to suburban beaches, race tracks, and other recreation and amusement places, and to provide additional service for the accommodation of shoppers and others traveling from outlying districts to the city."

Engines of War I At Work in Africa

American railroaders have to learn European practices and terminology

Twenty or more American-built locomotives which hauled ammunition and other supplies to American troops in Europe in the first World War once more are in military service under the Stars and Stripes, but this time in North Africa, the War Department has announced.

These locomotives were in regular commercial service on the French-owned Algerian and Moroccan railroads prior to the landing in North Africa of the invasion force from the United States. Since that landing, they have "joined up" for another hitch with Uncle Sam, augmenting an undisclosed number of modern counterparts which accompanied or followed the "Yanks" into North Africa.

Reports from Algeria and Morocco say that these locomotive veterans of the last war are about as serviceable as ever, and that the Transportation Corps' Railway Shop Battalions had no difficulty tuning them to mechanical perfection. They no longer are things of beauty in an aesthetic sense, if they ever were. But their unfailing response to throttles in the hands of soldier-engineers, and their tireless performance of military duties make them objects of pride and affection to the Transportation Corps' Military Railway Service, made up chiefly of men from America's railroads.

The twenty or more "veteran" locomotives presently serving in North Africa constitute only a small portion of the total number sent from this country to Europe during World War I; all told, there were 1,333, and 17,800 railway cars of various types—box cars, flats, tanks, gondolas and dumps. The locomotives are of the so-called "Pershing" type, built essentially for freight service. After the Armistice they were sold to France. While the history of most of them is obscure, it is supposed that the entire number was put into service on French railroads.

Our troops in North Africa have not, of course, had to rely entirely upon railway equipment they found there. The Transportation Corps has forwarded a considerable quantity of American railroad supplies and equipment to meet every conceivable requirement. Some of this equipment would be strange, at least in appearance, to the average American. For example, there is the car called the "brake van," which follows British practice and takes the place of a caboose.

This brake van, in addition to providing shelter for the train crew, is also used to provide special hand-braking equipment, since on many European railroads air-brakes are a rarity and special hand-braking facilities are needed. In French-style railroading in North Africa, many cars are provided with little cupolas in which brakemen ride—and multitudinous brakemen provide the necessary brake applications in response to whistle signals from the engine. The North African railroads employ hand brakes, not air brakes, on their rolling stock, and as on all French railroads, there are several cars similar to the British brake vans. These are spaced throughout the train. A trainman rides in the cupola of each brake car and, as whistle signals are sounded by the engineer, applies or releases the brakes. The space below the cupola of the French brake car is loaded with freight so that the car is essentially another freight carrier.

Reports from the various Theatres of Operations state that lack of world-wide standard railroad nomenclature is a source of trouble on occasion. The British, for example, call a freight car a "wagon." In America, a car designed for carrying liquids is termed a "tank car," but the British use the word "cistern" for this type of conveyance. Since the advent of the fighting tank, the expression "tank car," it has been reported, has become confusing. A fighting tank is carried on a flat car known as a "war flat."

That the necessities of war ultimately will compel the troops of the Allied Forces to accept and use a standard railroad nomenclature has been reported by a number of Chiefs of Transportation in Theatres of Operations to their chief, Major General Charles P. Gross, commanding the Transportation Corps. As a matter of fact, this already has been accomplished to some extent by setting up common items of supply. So, if it is necessary sometime in the future for the American oil men or dairymen to ship their products in "cisterns," and the British householder to ship his furniture in a "box car" or "freight car," the whole thing can be blamed on the war.

Passenger Travel So Far in 1943 2½ Times More Than '39

For the first three months of 1943 the volume of passenger travel throughout the country, measured by the number of passengers carried one mile, had increased an average of 264 per cent as compared with 1939, according to a statement issued by F. E. Williamson, president of the New York Central, following a meeting of the Eastern Railroad Presidents Conference on June 17.

The increase is, however, far from uniform in all sections of the country. It ranges from 138 per cent in New England, where runs are relatively short, to 615 per cent in the southwest where runs are longer. The eastern district as a whole, said Mr. Williamson, shows an increase of 166 per cent, which is well below the national average. This district, which includes New England, the central eastern and Great Lakes states, in the first three months of 1939 accounted for more than half the volume of passenger travel in the whole country. In the first three months of 1943, however, it represented but 38 per cent. The greatest expansion of passenger travel, according to Mr. Williamson, has taken place in those areas where large Army training camps are located.

Congested travel conditions would be considerably relieved, Mr. Williamson observes, if the flow of travel could be leveled out—that is, if summer travel might be spread out over a longer period than July and August and if trips were made on other than week-ends.

I. C. C. Coal Order—On Again, and Off Again

The Interstate Commerce Commission's Service Order No. 120, requiring railroads not to deliver bituminous coal to consignees whose stockpiles exceed the supply required for a specified minimum period, went through another on-again, off-again performance this week while the latest work "stoppage" of the miners was in effect. Order No. 120-D made the restrictions effective June 21, while Order 120-E came along on the 23rd to take them off again.

The effect of earlier work "stoppages" was seen by Mr. Ickes in the figures indicating all-rail coal movements into New England for the week ended June 5, which totaled 5,563 cars, a decrease of 1,024 cars from the previous week, and a decrease of 1,189 cars from the movement reported in the corresponding 1942 week.

Eastern Oil Movement

Rail shipments of petroleum into the Atlantic coast area were approaching their pre-flood levels in the week ended June 12, Petroleum Administrator Ickes announced last week, disclosing that the average daily movement in that week was 984,522 barrels, of which 968,535 barrels a day was the average handled in tank cars. The increase over the preceding week's average was 69,793 barrels a day, he pointed out.

"Emergency measures plus day and night toil on the part of thousands of railroad and oil men have overcome many of the effects of the floods in far less time than any man familiar with the problems would reasonably demand," Mr. Ickes declared. "Knowing as I do, that the full repairs have not yet been made and cannot be made 100 per cent effective in some cases for a little while yet because of continued high water in the Arkansas River, I am all the more impressed with the oil transportation record of the week. A great job is being done in the face of extreme obstacles."

L. N. E. R. Engine Falls Into a Bomb Crater

One morning recently a notice was posted at the Liverpool Street (London) Station of the London & North Eastern (England) telling passengers that, owing to a "failure" at Ingatestone, the main line service to Colchester and beyond was subject to delay.

The "failure," it later developed, was caused by the engine of a train traveling between London and Harwich falling into an enormous crater in the roadway made by an enemy bomb which exploded on the main line during a night raid.

The train, which left London at 8:45 p. m., was crowded with service men and civilians and was traveling at reduced speed between Shenfield and Ingatestone. An exploding bomb turned what had been a pair of tracks into a yawning crater, into which the engine plunged—resulting in the death of both engineer and fireman. The tender mounted the engine and the cars following were fanned out behind. One passenger and a trainman were slightly injured.

Repair gangs and equipment were immediately rushed to the scene and by 5 p. m. the following day all the coaches—one of which had been thrown halfway down a steep embankment—were back on the rails. Three-quarters of an hour later the tender had been lifted by cranes from its position atop the engine. Removing the engine from the crater presented quite a problem and many hours of digging, burrowing and tunneling were needed before chains could be run around it and the cranes completed their task of lifting it clear. The incident occurred at a point in the line where there was a steep embankment and filling in and

L.N.E.R. Photo

The Scene Near Ingatestone Shortly After the Engine of a London to Harwich Night Train Fell Into a Bomb Crater

leveling off the crater so the tracks might be re-laid was not an easy task. The line was, however, back in operation in record time.

During the period of interrupted service, passengers were taken by train as far as Shenfield and then transported by bus around the stretch of track put out of service, returning to the rails at Ingatestone.

ODT Wants Navy to Put Three Men in Sleeper Section

Efforts have been made "without success" by the Office of Defense Transportation to secure modification of Navy Department regulations so as to permit assignment of three sailors or marines to each section of sleeping cars used for the movement of Naval personnel. So ODT Director Eastman recently told Representative Hinshaw, Republican of California, who sought confirmation of reports that each sailor or marine had a berth to himself, while troops continue to ride three to a section.

Mr. Hinshaw inserted his letter and Mr. Eastman's reply, which confirmed the reports, into the Congressional Record for May 18, the day on which the House approved ODT appropriations for the fiscal year 1944. "I know of no reason for this discrimination, nevertheless it exists," Mr. Hinshaw told the House. He added that "if they want to save transportation space the Navy can assign three to a section the same as the Army does."

Another Big One Moves by Rail

The largest single unit freight shipment ever carried over the Canadian National—a huge cylinder, technically known as a "B.B. Extractor"—was recently routed over the system's double-track main line from Lachine, Que., to its destination in Southwestern Ontario.

The shipment, a war job for a synthetic rubber plant, was moved on a five-day schedule. It weighed 150 tons, was more than 165 ft. long, 12½ ft. wide and 16⅔ ft. above the top of rail. The shipment was placed on three flat cars at the shipper's Lachine plant, being cradled in special beds on the end cars—the middle one being an "idler." Getting the shipment on to the main line was a big job for the engineering and operating forces.

Because of its length and projections, the tank was moved only during daylight and then at a restricted speed of 15 m. p. h. Extra precautions had to be taken at curves so that the front end did not sheer off switch targets or signal posts. The special train making the movement carried a squad of seven men who were physically and mechanically prepared to deal with any problem which might develop enroute.

Great Lakes Board Meeting

The Great Lakes Regional Advisory Board will hold its fifty-sixth regular meeting at Cleveland, Ohio, on June 30. At a joint luncheon with the Traffic Club of Cleveland, the Cleveland Chamber of Commerce, and the Cleveland Purchasing Agents Association, Col. J. M. Johnson, commissioner of the Interstate Commerce Commission, will be the guest speaker at the luncheon.

Speakers at the morning session will include Robert J. Bowman, Detroit, president of the Pere Marquette; Caleb R. Magee, manager of the Open Top Section, Car Service Division, A. A. R., Washington, D. C.; William J. McGarry, manager of the Ore and Coal Exchange, Cleveland; and C. H. Dietrich, executive vice-chairman, Freight Claim Division, A. A. R., Chicago. There will be committee reports also, and the Board's railroad contact, executive and freight loss and damage prevention committees will meet at the same hotel on Tuesday, June 29.

Materials and Prices

Following is a digest of orders and notices of interest to railroads, issued by the War Production Board and the Office of Price Administration since June 19.

Calcium carbide—General Preference Order M-190, as amended June 15, exempts the acceptance of delivery in any one calendar month of not more than 10 tons of calcium carbide in the aggregate, provided that the purchaser has not been specifically authorized or directed to accept delivery of any quantity of calcium carbide during such month.

Construction—Form PD-200 used to make application for authority to begin construction and for priority assistance has been replaced by Form WPB-617, according to an announcement on June 15. The new form constitutes an application for allotment of controlled materials. Besides combining all functions on one form, WPB-617 will be a smaller letter-size and will fit standard typewriters and files. Under the Controlled Materials Plan, any person who made application for authority to begin construction and for priority assistance on Form PD-200, and whose application was approved, was required to file additional forms for controlled materials. When WBP-617 comes into use July 1, the filing of additional forms will no longer be necessary, since controlled materials will be allotted simultaneously with the granting of authority to begin construction. The authorization form will be CMPL-224, which combines the functions of the P-19 series of orders and forms CMP-4C.

Fire equipment—Priorities Regulation 3 as interpreted, effective June 17, explains that fire protective equipment includes only end items and does not include materials or parts required for repair or maintenance of existing equipment.

Inventory—Interpretation No. 1 to CMP Regulation No. E, effective June 19, explains that material is considered to be inventory until it is actually put into process or is actually installed or assembled. The regulation prohibits the acceptance of delivery of any item of controlled material if the user's inventory is, or by virtue of such acceptance will become, greater than the maximum prescribed. Putting into process does not include minor initial operations, such as painting, and does not include any shearing, cutting, trimming or other operations unless such initial actions are part of a continuous fabrication or assembling operation. Nor does it include inspection, testing and aging, nor segregation or earmarking for a specific job or operation.

Motors—General Conservation Order L-221, as amended June 18, relaxes the restrictions on the purchase of electric motors and generators to exclude from the limitations and restrictions of paragraph (d), on certification, any order for machinery or equipment into which will be incorporated or to which will be attached a special motor or generator, if such special motor or generator was required on June 18, 1943, by the function and design of such machinery or equipment.

Railroad equipment—Bulletin WPBI-42, issued by the Transportation Equipment Division on June

Canadian National Photo

Three Flat Cars Were Needed to Move This Tank Over the C.N.R.

15, amends the B Product List dated May 15, 1943, in so far as the fourth quarter is concerned with respect to railroad and locomotive accessories. The instructions read as follows:

The official CMP Class B product list dated May 15, 1943, omits the following product classifications carried in previous issues of the list: railroad and locomotive accessories, and accessories for rapid transit and street railways and trolley and motor busses. For the fourth quarter of 1942, items listed on attached sheet will be handled as B items in accordance with the provisions of the Controlled Materials Plan. Items not specifically listed but which are known in the trade as car accessories, locomotive accessories, street car or rapid transit car accessories, or trolley bus and motor bus accessories are not to be handled as B items.

Class B Items

Railroad car accessories, not including air brake actuating mechanism:
Brake beams
Brake shoes
Car seals
Coupler centering devices
Coupler and coupling devices
Draft gears and springs
Flexible metallic air joints
Flexible metallic steam joints
Hand brakes
Side bearings
Snubbers, truck spring
Springs, truck
Uncoupling devices

Railroad locomotive accessories, not including air brake actuating mechanism:
Air signal equipment
Alarms, low water
Bell ringers
Blow off cocks and mufflers
Boiler feed equipment, heaters, checks
Boosters
Brake shoes
Buffers, radial
Circulators
Coal pushers
Compensators and snubbers for driving boxes
Cylinder drain, relief, drifting devices
Fire doors, pneumatic
Flange oilers
Foam collapsing systems
Gears, poppet valves, reverse, power operated
Headlight equipment, turbo electric
Horns
Joints, flexible for air, steam and oil
Lateral motion devices
Lubricating systems
Plugs, arch tube, circulation, washout and boiler drop
Sanding equipment
Signal equipment, air
Siphons
Soot and cinder cleaners, automatic
Springs, driving, engine truck, trailer truck, tender
Sprinkler, coal
Steam dryers
Steam heat equipment
Stokers
Superheaters
Tank water connection controls
Throttles, front end, dome
Universal joints, injector, turret
Water gages, columns, guards
Whistles
Windows, cab
Windshields, cab

Steel—Interpretation 8 of CMP Regulation No. 1, issued June 18, explains that any producer who has accepted orders that he does not expect to ship in the month requested must immediately notify his customer and take steps to correct the status of such orders.

Steel bars—Amendment to Direction No. 5 to CMP Regulation No. 1, issued June 17, relaxes restrictions on the delivery of heat-treated steel bars to warehouses. Direction No. 5, issued April 19, prohibited deliveries of the normalized or heat-treated bars to warehouses to reduce an excessive load on heat-treating facilities. Under the direction as amended, the ban will be in effect only until October 1, and warehouses will be permitted to accept deliveries on a restricted basis thereafter.

Tractor parts—Limitation Order L-53-b, amended June 17, permits a purchaser to buy on the same certificate repair parts for more than one tractor. Formerly, a purchaser was required to furnish the dealer with a separate written certificate of minimum requirements for each track laying tractor owned. The amended order permits the sale of parts to repair and recondition worn or damaged parts or sub-assemblies. Previously, repair parts could not be purchased to repair a complete unit. It eliminates the provision requiring the purchaser of repair parts to retain the used parts that are being replaced. It relaxes the requirement that a producer's sales of critical repair parts be apportioned on a percentage basis among the five categories.

Prices

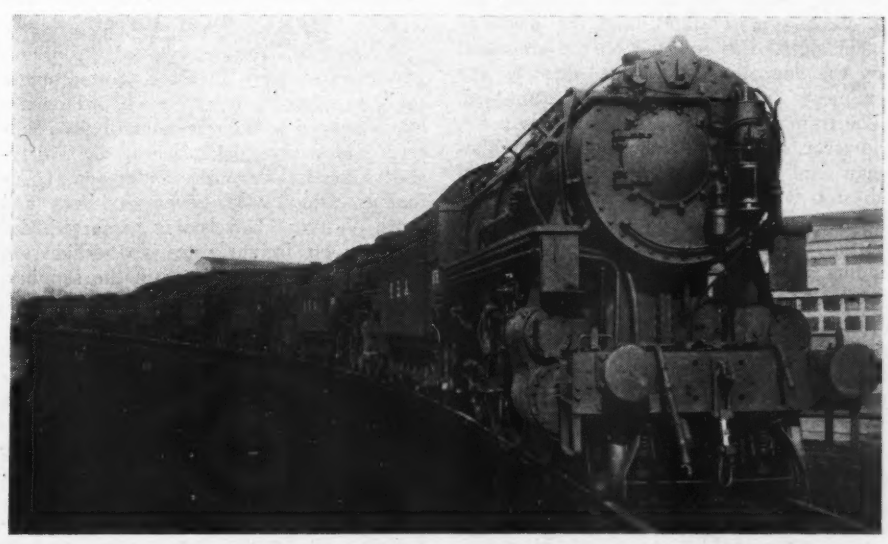
Bolts and nuts—Amendment No. 1 to Maximum Price Regulation No. 147, effective June 22, redefines the types of bolts, nuts, screws and rivets covered by the regulation. The redefining draws a more specific line between the special machined-from-bar bolts, nuts, screws and rivets covered by Regulation 147 and screw machine products in Maximum Price Regulation No. 136. The amendment also provides that maximum prices for machined-from-bar special bolts, nuts, screws and rivets may be computed on the basis of costs as of March 31, 1942, plus the customary markup on that date, rather than on the October 1 to 15, 1941, base pricing date. The base pricing date of Maximum Price Regulation No. 136 for screw machine products is March 31, 1942. The amendment requires manufacturers to recompute maximum prices of all special products whenever a new higher price for a special product is charged. It eliminates the provision freezing the price of a special item furnished between October 1, 1940, and October 1, 1941, to the last price charged during that period. Regulation 147 provides maximum prices for all bolts, nuts, screws and rivets manufactured from ferrous or non-ferrous metals other than aluminum, except screw machine products other than bolts, nuts, screws and rivets; products sold as pole line hardware; wire nails, which are priced under Revised Price Schedule No. 6 (iron and steel products); cut nails, cut tacks, cotter pins or washers, which are priced under the General Maximum Price Regulation; pipe plugs and fittings, which are priced under Maximum Price Regulation No. 188, and solid or flexible staybolts, which are priced under Maximum Price Regulation No. 136.

Brass—Maximum Price Regulation No. 408 (distributors' prices for brass mill products and services), effective June 21, rolls back prices and service charges for those distributors who had previously been permitted by the General Maximum Price Regulation to add to mill list prices the differentials charged in the month of March, 1942. These differentials, now limited to 3 cents a lb., had risen to 4 and 5 cents in the case of some sellers, and on certain special products had been as high as 15 cents a lb. above the mill list price. The products for which the regulation establishes maximum prices include sheet, plate, strip, roll, coil, rod, bar, tube, pipe, non-electrical wire and standard extruded shapes fabricated out of copper or copper base alloys, with the exception of items covered by Revised Price Schedule No. 82 (wire, cable and cable accessories). The services include slitting, shearing, cutting to size, crating and special packaging.

Lumber—Revised Maximum Price Regulation No. 222 (northern softwood lumber), effective June 22, simplifies the regulation to facilitate use; extends the regulation to include Canadian northern softwood lumber sold in this country; establishes dollars-and-cents prices for 14 northern softwood items previously not specifically priced; increases prices of 1 by 4 hemlock boards in most grades; provides specific changes for many additional standard milling operations, and provides additional estimated weights to be used in computing delivered prices for various grades and sizes of lumber. Maximum prices for sales of softwood lumber imported from Western Ontario are established on the same basis as the ceiling prices for like species of domestically produced lumber. Ranier, Minn., is designated as the port of entry at which established prices shall apply. Maximum delivered prices of such lumber shall be computed by adding freight costs from Ranier to destination to the established prices. Species of imported Canadian lumber for which the maximums are established include white pine, Norway pine, jack pine, northern white cedar, eastern spruce and Aspen.

Scrap—The twenty-third digest of interpretations of prices, issued June 11, refers to railroad scrap rejected by a consumer and sold to a dealer. If the scrap is sold to a dealer and reworked by the dealer, the scrap loses its railroad identity, and the maximum price is established by Section 1304-14 (d). If the scrap is merely sold to the dealer and, without reworking, shipped from the first consumer's plant to another consumer, the maximum price for the scrap is that from the railroad directly to the second consumer. The digest also explains that the maximum price for unprepared heavy melting scrap, other than bundles, shall be $3.50 less than the maximum prices for the corresponding grade of prepared scrap. Prior to Amendment No. 10, effective January 22, 1943, the reduction was $2.50 per gross ton. The reduction of $3.50 is applicable to unprepared heavy melting steel scrap shipped on or after January 22, 1943, even though it was shipped pursuant to an allocation order issued prior to that date. The digest also refers to steel castings from foundries subsequently acquired by other foundries; malleable iron castings sold pursuant to contract entered into before base period, and structural shapes and plates in the form of built up beams and trusses and boiler plates not true to line or which have rivets.

* * *



A String of Army Locomotives from Baldwin—Designed for Areas Where European Standards Prevail, as Coupling and Buffing Mechanisms Reveal

GENERAL NEWS

I.C.C. on Collision at Sageeyak, Okla.

Cause was failure to observe meet order—I.C.C. urges block signaling

As a result of a head-on collision near Sageeyah, Okla., on the Missouri Pacific line between Coffeyville, Kan., and Little Rock, Ark., at 4.56 p. m., on April 21, in which 3 employees were killed and 119 passengers and 6 employees were injured, the Interstate Commerce Commission has recommended that the road install an adequate block signal system on the section of the line on which the accident occurred, on which the average daily movement of trains was 20.3 during the 30 days preceding.

The collision was directly caused by failure of the crew of one of the trains involved, passenger extra 6511 North, to obey a meet order, according to the report of the investigation under direction of Commissioner Patterson. It occurred on a single track line where operations are governed by timetable and train orders, and involved the 6-car passenger train and a 12-car freight, No. 191. Sageeyah had been established as the meeting point between the two trains, and the passenger train was required by the road's rules to wait clear of the switch by which the freight would enter the siding there unless it was seen that No. 191 was in the clear on the siding.

The crew of the passenger train received copies of the train order involved about 10 min. before the accident occurred, the I. C. C. report states, and the meeting-point signal was sounded on the air-signal by the flagman, and acknowledged by the engineer, before Sageeyah was reached. The train did not slow down at that point, however, and the flagman and head brakeman did not immediately take action to stop it because they were confused by the presence of another train on the siding. After they realized No. 191 was not on the siding they were unable to reach a conductor's valve before the accident occurred. The conductor of Extra 6511 had not read the order, being otherwise engaged.

There was no application of brakes on the passenger train up to the time of the collision, and it was then traveling about 50 m.p.h. The engineer of the freight had placed his brake valve in emergency position as soon as he saw the opposing train, but the speed of the freight had been reduced only slightly, to about 30 m.p.h., when the accident occurred. Both engines, the first two passenger cars, and three cars of the freight were demolished, and one other car on each train was derailed.

C. & O. Gets Harriman Award

The Chesapeake & Ohio has won the gold medal Harriman award by the American Museum of Safety for its 1942 safety record. In the silver medal class the winner is the Bessemer & Lake Erie, while the bronze medal goes to the Lake Superior & Ishpeming. Presentations were made at New York on June 24 and further details will be reported in our next week's issue.

North Western Trains Women as Ticket Clerks

The Chicago & North Western has established a training school for instructing women to replace men passenger reservation clerks who have entered war service. Nineteen women have been enrolled in the first course. They receive compensation during their training.

I. C. C. Service Order

As the result of floods causing washouts and bridge damage on the Canadian National and Grand Trunk in the vicinity of Lennoxville, Que., and between Sherbrooke, Que., and Island Pond, Vt., the Interstate Commerce Commission on June 16 issued Service Order No. 131, requiring these roads to forward freight traffic by the most available routes, without regard to shipper's routing.

Western and Southern Governors Want Lower Rates

Western Governors joined Southern governors on June 23, for concerted action to obtain lower freight rates on articles manufactured in their sections of the country. The action took place at the Thirty-sixth annual Governor's Conference at Columbus, Ohio, when seven Southern and five Western Governors conferred informally on freight rates and decided to hold a joint meeting later in the summer.

Motor Carrier Insurance

The Interstate Commerce Commission has reopened the Ex Parte No. MC-5 proceeding for further hearing on proposals recommended by its Bureau of Motor Carriers for amendment of Rule VIII of the rules and regulations governing the filing of insurance so as to provide for a minimum financial standard for insurance companies. The further hearing will be held in Washington on July 14 before the commission's Division 5.

Study Board Gets $275,000 for '44

Resources Board gets $50,000 to liquidate its affairs by August 31

Congressional action was completed June 18 on the fiscal 1944 Independent Offices Appropriation Bill which gives the Transportation Board of Investigation and Research $275,000 to carry on until September 18, 1944, and the National Resources Planning Board $50,000 to liquidate its affairs by August 31. Thus did the Senate accept the House's action on these matters which remained in disagreement when the conference report on the bill was filed.

The bill also carries $8,912,000 for the Interstate Commerce Commission, and it also restores salaries of I. C. C. members to the $12,000 a year basis provided in the Interstate Commerce Act, removing the provision, carried for several years in appropriation bills, which has limited such payments to $10,000 a year. Also included is $133,000,000 for the Public Roads Administration.

The House's action on the Transport Board and Resources Board items, which has now become the final disposition of them, was reported in the *Railway Age* of June 19, page 1235. As there noted, the former's appropriation of $275,000 represents a cut of $75,000 from the $360,000 carried in the Senate version of the bill. The final version does, however, eliminate that Senate rider which had stipulated that no more than $50,000 could be spent on the study of the relative economy and fitness of carriers; although it carries another like that on the current B. I. R. appropriation which stipulates that the amount granted "shall be so used as to complete" the work of the Board.

B. I. R. got around that this time, breaking into the bill without benefit of a Bureau of Budget estimate when the measure was before the Senate committee on appropriations. It originally asked for $564,000, but later submitted revised estimates calling for $552,500, or slightly more than twice the $275,000 finally approved by Congress.

The Resources Board came before Congress with a Bureau of Budget estimate calling for $1,400,000. It got nothing in the House version of the bill, but the Senate approved $200,000 to be used for the coordination of planning with state and local governments. The House conferees went to work on this $200,000, coming up with the $50,000 liquidating fund. In appropriating the latter, Congress undertook to make sure that NRPB would

really liquidate by August 31. It provided that the Board should not receive funds from any other source, thus baring an allotment from special funds of the President; that its records and files "shall be transferred to The National Archives"; and that its functions "shall not be transferred to any other agency and shall not be performed after such date except as hereafter provided by law or as authorized in the ensuing paragraph of this proviso." The latter merely authorizes the director of NRPB to perform until January 1, 1944, such duties "as may be incident to the effectuation of the discontinuance of the Board."

Congress' action was followed this week by a request from President Roosevelt for an additional $42,500 for NRPB. The accompanying statement from Wayne Coy, acting director of the Bureau of the Budget, said the amount was needed because the $50,000 liquidation fund was not sufficient to provide for accumulated and accrued leave to the credit of the Board's employees.

Giving prompt consideration to the President's request, the House committee on appropriations cut the $42,500 to $29,500 and reported the latter amount in a deficiency appropriation bill which went to the House on June 23.

May's Revenue Ton-Miles 12½ Per Cent Above Last Year

Class I roads handled about 12½ per cent more ton-miles of revenue freight in May, than in May, 1942, according to a preliminary estimate prepared by the Association of American Railroads.

In the first five months of 1943, Class I railroads performed 23 per cent more revenue ton-miles of service than in the same period of 1942. Compared with the first five months of 1939, the freight service performed in the first five months of 1943 was up 143 per cent.

The accompanying table summarizes revenue ton-mile statistics for the first five months of 1943 and 1942.

Revenue Ton-Miles of Freight

Month		1943	1942	Per cent increase
3 Months		170,793,306,000	132,025,560,000	29.4
April	*a*	59,500,000,000	49,997,495,000	19.0
May	*b*	61,000,000,000	54,270,231,000	12.4
5 Months		291,293,306,000	236,293,286,000	23.3

a Revised estimate
b Preliminary estimate

Equipment on Order

Class I railroads on June 1 had 33,537 new freight cars on order, according to the Association of American Railroads. On the same date last year they had 49,548 on order.

This year's June 1 total included 3,494 plain box; 2,525 automobile box; 7,183 gondolas; 18,457 hoppers; 200 stock and 1,678 flat cars.

Railroads also had 937 new locomotives on order on June 1, which included 418 steam, seven electrics, and 512 Diesel-electrics. On June 1, 1942, they had 950 locomotives on order which included 395 steam and 555 electrics and Diesel-electrics.

Class I railroads put 7,484 new freight cars in service in the first five months of 1943, compared with 44,546 in the same period last year. The former total included 2,385 hopper, 3,504 gondola, 1,033 flat 135 automobile box, 379 plain box, one stock and 47 miscellaneous freight cars. They also put 251 new locomotives in service in the first five months this year, of which 178 were steam, eleven electric, and 62 Diesel-electric. New locomotives installed in the same period last year totaled 292, of which 119 were steam and 173 were electric and Diesel-electric.

Ask I. C. C. to Reopen Ex-Barge Proportional Rate Case

Firms handling grain have petitioned the Interstate Commerce Commission to reopen its proceedings in I. & S. 4718, dealing with proportional rates ex-barge to Official Territory, for rehearing and for an order fixing specific rates on ex-barge grain moving eastward from so-called rate-break points.

This petition seeks to reopen before the commission the case decided June 14 by the United States Supreme Court, as reported in *Railway Age* of June 19, page 1235, in which the commission held that proportional rates applied to ex-lake or ex-rail grain moving into Official Territory need not be applied to ex-barge grain as a matter of law. Pointing out that they were "mistaken" as to the extent to which the commission was required to apply the statutory provisions against rate discriminations and as to the law, as finally interpreted by the highest court, the petitioners have now asked the commission to afford them opportunity to seek relief from the application to ex-barge grain of local rates through the provision of specific reshipping rates to apply to such grain movements.

N. Y. Central Ad Achieves Top Readership

The highest readership of any transportation advertisement and the fourth highest rating of all advertising ever surveyed by the Advertising Research Foundation of the Association of National Advertisers, the American Association of Advertising Agencies, and the Bureau of Advertising of the American Newspaper Publishers Association was scored recently by the New York Central.

The advertisement which won top readership in this four-year survey was one published by the railroad in March entitled, "Last Night I Couldn't Sleep"—showing a man standing on a bridge overlooking three railroad tracks, with two trains speeding through the night in opposite directions. The copy which accompanied the display expressed the man's thoughts about his son in the service, the movement of troops and war materials over the railroads, the "spirit of America at War" and concluded with a resolution to sacrifice more to help his boy. Public service advertising by this railroad is handled by the Geyer, Cornell & Newell Agency.

House Bill to Extend Time Limit on Overcharges

Representative Peterson, Democrat of Florida, has introduced H.R. 2970 "to increase the period of limitation on actions against railroad carriers for recovery of overcharges from two to four years." As noted in the *Railway Age* of June 12, page 1196, a similar bill (S. 1165) was previously introduced in the Senate by Senator Shipstead, Republican of Minnesota.

L. & N. Selecting "Sweetheart" for Its Battalion

A contest is being conducted among employees of the Louisville & Nashville by its magazine to select a "sweetheart," from among its feminine employees, for the 728th Railway Operating Battalion, which is made up of a large number of employees from this railroad. The winner of the contest, which closes on July 5, will be given the name "Miss Ellen N." and will be given a trip to Clovis, N. M., where the unit is stationed.

E. I. Lewis Retires; Lacey Heads I. C. C. Valuation Bureau

Ernest I. Lewis, director of the Interstate Commerce Commission's Bureau of Valuation since 1933 and a former member of the commission, has retired and will be succeeded by Robert A. Lacey, who has been head auditor—property changes. Mr. Lewis' retirement will become effective September 1 when the title of director will be assumed by Mr. Lacey who will meanwhile head the Bureau as acting director.

1942 Earnings of Intercity Motor Carriers of Property

Class I intercity trucking companies which filed comparable reports with the Interstate Commerce Commission for the two years had a 1942 net income, after income taxes, of $18,315,628, down 3.9 per cent from 1941's $19,068,182. The compilation just issued by the commission's Bureau of Transport Economics and Statistics is based on 1,014 reports representing 1,015 common and contract truckers.

The 1942 gross revenues of the reporting carriers totaled $583,927,344, up 10.6 per cent from the previous year; while total expenses at $551,932,638 were up 10.2 per cent. Net operating revenue at $31,-994,706 was up 19.6 per cent, but adjustments for other income and deductions produced a figure of $30,656,814 for 1942 net income before income taxes. This was 21.9 per cent better than the comparable 1941 figure, but the income taxes knocked it down to bring the net income after in-

come taxes 3.9 per cent below 1941, as noted above.

Operating statistics summarized by the Bureau show that the 67,230,537 tons handled in 1942 by the reporting common carriers was 9.8 per cent above their 1941 tonnage, while their truck and tractor miles were down two per cent. Contract carriers had 3.7 per cent less tonnage in 1942—13,197,620 tons as compared with 13,700,287 tons; and they operated 20.4 per cent less truck and tractor miles.

Freight Car Loading

Loadings of revenue freight for the week ended June 19 totaled 868,241 cars, the Association of American Railroads announced on June 24. This was an increase of 13,755 cars, or 1.6 per cent, over the preceding week; an increase of 23,328 cars, or 2.8 per cent, above the corresponding week last year; and a decrease of 17,298 cars, or 2 per cent, below the comparable 1941 week.

Loading of revenue freight for the week ended June 12 totaled 854,486 and the summary for that week, compiled by the Car Service Division, A.A.R., is as follows:

Revenue Freight Car Loadings

For the Week Ended Saturday, June 12

District	1943	1942	1941
Eastern	165,276	155,010	188,164
Allegheny	186,764	183,504	195,068
Pocahontas	57,244	57,102	59,013
Southern	119,079	120,990	119,343
Northwestern ..	134,313	135,845	132,063
Central Western	121,678	114,866	116,719
Southwestern ..	70,132	65,318	52,604
Total Western Districts	326,123	316,029	301,386
Total All Roads	854,486	832,635	862,974
Commodities			
Grain and grain products	45,466	34,684	37,006
Live stock	12,891	11,133	10,007
Coal	170,513	166,766	158,621
Coke	13,794	14,102	13,165
Forest products.	44,298	49,295	42,403
Ore	87,347	86,285	73,549
Merchandise l.c.l.	98,763	94,556	159,597
Miscellaneous ..	381,414	375,814	368,626
June 12	854,486	832,635	862,974
June 5	667,575	854,689	852,940
May 29	852 518	795,621	801,783
May 22	843,334	837,676	866,027
May 15	848,522	839,054	860,802
Cumulative Total, 24 Weeks ...	18,467,937	19,365,070	18,056,589

IN CANADA.—Car loadings for the week ended June 12 totaled 69,255, the highest reached so far this year. For the corresponding week last year the total was 65,388, according to the compilation of the Dominion Bureau of Statistics.

Total for Canada:	Total Cars Loaded	Total Cars Rec'd from Connections
June 12, 1943	69,255	36,406
June 5, 1943	66,385	35,361
May 29, 1943	62,003	34,981
June 13, 1942	65,388	33,649
Cumulative Totals for Canada:		
June 12, 1943	1,496,160	879,718
June 13, 1942	1,505,742	768,088
June 14, 1941	1,366,359	696,727

ODT Appointment

Robert L. Groover has been appointed associate director of the Division of Railway Transport of the Office of Defense Transportation in charge of a new section of controlled materials (way and structures). Stephen E. Shoup, who has been serving as assistant to the director of the Division of Railway Transport in dealing with the Controlled Materials Plan as it affects way and structures, has been named deputy associate director of the new section.

Mr. Groover, a native of Quitman, Ga., comes to the ODT from the Atlantic Coast Line, where he held the position of principal assistant engineer, with headquarters at Wilmington, N. C.

Greyhound Applies for Broad Air Rights

The Greyhound Corporation, parent corporation of the Greyhound Lines bus system, has applied to the Civil Aeronautics Board for a certificate of public convenience and necessity covering civil aircraft services in the transportation of passengers, baggage and light express over 78 routes through the United States. Helicopters or similar aircraft would be used, schedules would be coordinated with bus operations of applicant's subsidiaries, and joint through air-bus rates and fares would be sought with all air and bus companies willing to participate.

The application states that the applicant does not now own any aircraft for the proposed service, but it is conducting negotiations with manufacturers. And it expects that it will be permitted in the near future to purchase two or three helicopters to operate between Detroit, Mich., and Flint, or between such other points as the Board may determine on temporary and experimental basis. Bus lines of applicant's subsidiaries parallel most of the air routes sought, while routes not thus paralleled are served by bus lines connecting with the Greyhound network, the application states.

Forwarder Adjustment to Ex Parte 148 Effective June 15

Tariffs whereby freight forwarders have brought their rates into line with the rail adjustment resulting from the removal of the Ex Parte 148 increases on May 15 became effective June 15 with the expiration of the 30-day period for which the Interstate Commerce Commission suspended the schedules originally published on short notice. The commission's action permitting the new rates to become effective discontinues the I. & S. No. 5225 proceeding in which they were involved.

Status of Cleveland Union Stock Yards Company

The Interstate Commerce Commission has reopened the Ex Parte No. 127 proceeding relating to the status of public stockyards companies for further hearing and further consideration "in respect of the common carrier status of the Cleveland Union Stock Yards Company and Livestock Terminal Service Company, and arrangements and agreements between said companies affecting the interstate transportation of shipments of ordinary livestock consigned to or shipped by persons at the Cleveland Union Stock Yards."

The commission's order also reopens No. 28714, Swift & Company v. Baltimore & Ohio Railroad Company, et al. No date has yet been set for the further hearing.

Vaughan Becomes Chairman of Railway Assn. of Canada

R. C. Vaughan, chairman and president of the Canadian National, has been elected to the presidency of the Railway Association of Canada. Mr. Vaughan succeeds the late Sir Edward Beatty, G.B.E., chairman of the Canadian Pacific.

The Railway Association of Canada is a voluntary organization of Canadian railways, about 20 in number, which developed out of the Canadian Railway War Board established during the first World War, and deals with matters of mutual interest to the rail carriers of the Dominion.

May Operating Revenues 24.3 Per Cent Above 1942

Preliminary reports received by the Association of American Railroads from 89 Class I roads, representing 81.3 per cent of total operating revenues, show that those roads in May had estimated operating revenues amounting to $607,641,754, compared with $488,837,275 in the same month of 1942 or an increase of 24.3 per cent.

May freight revenues of the 89 roads amounted to $461,776,465 compared with $395,455,278 in May, 1942 or an increase of 16.8 per cent. Passenger revenues totaled $104,895,660 compared with $61,618,692, or an increose of 70.2 per cent.

Attacks Government Rule of Rails

The Transportation Association, in a letter to members, assails the recommendations of the National Resources Planning Board that railroad transportation facilities be placed under a federal agency for reorganization and modernization after the war. "The public is usually given some plausible pretext for the imposition of political nostrums," the letter reads. "There was the demand for 'security,' growing out of the depths of the depression; there were the 'ill-housed and the ill-fed.' The government came forward with one experiment after another to 'fill the gap left in an economic system which private business failed to plug up.' But, now the Planning Board anticipates a new 'emergency.' It finds that transportation in America is about to 'break down'—that financing from private sources will not be available after the war. This is a pure assumption to fit the recommendation. Only the government itself can bring about such a set of conditions."

The association also charged that the federal government is making use of the "'corporation method' to exercise the full benefits of government resources and power, yet circumventing the controls which are placed by congress when granting federal authority to government departments."

Proponents of deficit spending find the government corporation the best tool for the purpose of whittling away and eventually destroying private industry, it asserted.

"Almost without notice, bureaucracy can use these corporations to promote inflation (while politicians are giving lip service to its control); can pyramid the cost of government at will; and can displace private enterprise wherever it stands in the way of the 'planned' program."

February Bus Revenues 75.7 Per Cent Above February, 1942

Class I motor carriers of passengers reported February revenues of $25,121,214 as compared with $14,300,132 in February, 1942, an increase of 75.7 per cent, according to the latest monthly compilation prepared by the Interstate Commerce Commission's Bureau of Transport Economics and Statistics from 172 reports representing 177 bus operators. Passengers carried were up 90.4 per cent, from 21,880,588 to 41,658,644.

	Passenger Revenue		Passengers Carried	
	February 1943	February 1942	February 1943	February 1942
New England Region	$1,157,637	$658,553	3,591,127	1,880,023
Middle Atlantic Region	2,670,041	1,584,818	6,690,551	3,616,979
Central Region	3,567,603	2,338,124	7,736,933	4,514,979
Southern Region	6,907,734	3,850,548	10,178,736	5,176,326
Northwestern Region	597,528	436,977	582,183	382,379
Mid Western Region	2,062,969	1,154,636	1,896,766	985,668
Southwestern Region	4,252,952	2,128,894	6,076,062	2,645,707
Rocky Mountain Region	281,687	134,487	230,122	101,923
Pacific Region	3,623,063	2,013,095	4,676,164	2,576,604

The breakdown by regions of the bus revenue and traffic figures, which exclude data on charter or special party service, is given in the accompanying table.

Tax Deduction of Subsidiary's Loss Not Approved

One corporation is not entitled to treat itself and another subsidiary corporation as a single taxable person under the federal tax laws, a divided, United States Supreme Court ruled last week in deciding the case *Interstate Transit Lines* vs. *Commissioner of Internal Revenue*, in which that bus operator had sought judicial approval of its deduction as a business expense from its 1936 income tax return of the sum owed by it to its subsidiary, Union Pacific Stages of California, under a contract which required it to make up the subsidiary' operating deficits. This majority opinion by Justice Reed, affirming the decision of the federal circuit court of appeals, was opposed by a dissenting opinion by Justice Jackson, in which Chief Justice Stone and Justice Murphy joined.

Interstate's case rested upon the contention that its subsidiary's operating deficit was a proper business expense of the parent corporation, the majority held, and it went on to say that "it was not the business of the taxpayer to pay the costs of operating an intrastate bus line in California," particularly since the subsidiary had been set up to carry on such operations when the parent company had been barred from doing so. Moreover, said Justice Reed, the assumption of the deficit was not dependent upon a corresponding service or benefit rendered the parent company by the subsidiary.

In his dissent, Justice Jackson said the deduction had been denied upon a legal theory he considered erroneous. If the taxpayer required legal or medical services in California or advertised in California newspapers it would be entitled to deduct such expenses, even though its agent was doing what it could not itself do legally, he pointed out. "If states create dummies," he said, "business men may utilize them so long as they keep within the law, and the function of the revenue laws is not to tell them how they shall manage business, but to see that what they do has proper tax consequences."

I. C. C. Lets H. & M Charge 9 Cents to Downtown N. Y.

Reporting on further hearing in the I. & S. No. 4394 proceeding, the Interstate Commerce Commission in a report by Commissioner Porter has now found that the Hudson & Manhattan has justified for the duration of the war and six months thereafter a nine-cent fare between Jersey City, N. J., and Hoboken, and Hudson Terminal, New York. This is one cent short of the 10-cent fare which the road sought, but it is another cent onto the increase from six to eight cents which has been in effect since July 25, 1938, as authorized by the commission in the prior report.

The refusal of the latter to authorize the 10-cent fare was unsuccessfully contested in court by the applicant. Meanwhile, the Ex Parte 148 increase of 10 per cent in passenger fares came along in February, 1942, and this would have authorized the H. & M. to raise its downtown fare from eight to nine cents, and the fare into its Thirty-third street terminal from 10 cents to 11 cents. It did not, however, avail itself of this authority, preferring instead to leave the uptown fare at 10 cents while renewing its efforts to put the downtown fare on the same basis.

The commission based its present decision on changed economic conditions in H. & M. territory since the issuance of the prior report. It noted the protest of the Office of Price Administration, but expressed the view that the one-cent increase "is unlikely to have any inflationary effect." Commissioner Miller, concurring in part, would have gone further than the majority and found a 10-cent fare justified without a time limit. Commissioners Mahaffie and Patterson joined in his expression, while Commissioner Aitchison did not participate in the case.

CNR M. of W. Co-operators in Annual Meeting

The System Committee of the Maintenance of Way Co-Operative Movement of the Canadian National held its 13th annual meeting recently, with H. A. Dixon, chief engineer of the system, as chairman, and R. C. Vaughan, chairman and president of the company, as one of the principal speakers. The committee, which concerns itself with the working conditions, materials and methods of work of the 21,700 employees engaged in track and structures work throughout the System, sponsors a labor-management co-operative movement which was initiated on the C. N. R. some two decades ago and which has proven mutually satisfactory.

In stressing the responsibility placed on these employees, Mr. Vaughan in his opening address said "track is the foundation of our railway. I fully realize the heroic efforts you are sometimes called upon to make to meet the very difficult situations which arise. With all modesty, I say we have reason to be grateful for the contributions that we of the Canadian National have been able to make to the war effort. Our railway is by far the greatest war in-

C.N.R. Photo

President R. C. Vaughan of the C.N.R. Welcoming the Delegates of the System Committee of Maintenance of Way Co-operative Movement

dustry in Canada, and we have demonstrated to the people of Canada, beyond the shadow of a doubt, that the C. N. R. forms one of the greatest assets possessed by this great Dominion."

F. J. Fljosdal, president emeritus of the Brotherhood of Maintenance of Way Employees, spoke on the importance of the co-operative movement and noted that the first agreement with the C. N. R. made 38 years ago has been maintained.

N. B. Walton, executive vice-president of the C. N. R., and W. V. Turnbull, retired vice-president of the Brotherhood of Maintenance of Way Employees (now vice-president for Canada), also spoke to the group.

Dispatchers Demand Higher Pay

Demands for higher pay and changes in working rules were served on the railroads by the American Train Dispatchers' Association on June 15. The dispatchers have not participated in the recent joint wage movements of other rail unions, their demands having been drafted separately at Chicago by a meeting of general chairmen of the Dispatchers' Association.

The association is asking for a uniform rate of $400 a month for chief train dispatchers, $375 for assistant and night chief dispatchers and $350 for trick dispatchers. Although present rates vary on railroads, chief dispatchers get from $325 to $375, assistant and night dispatchers from $310 to $357.50 and trick dispatchers from $275 to $322.

At the same time, the dispatchers seek the establishment of eight hours as a basic day's work, including the meal period, and three-week vacations with pay annually, as compared with the two weeks now given. In addition, a broad program for sick leave with pay is proposed, effective July 1. Five days' sick leave is sought for those with one year's service, and another five days for each additional year of service up to five or more, when the allowance would be uniformly 26 days. The privilege of accumulating sick leave at the rate of 1¼ days a month is also sought.

Other rule changes are proposed, including a demand that dispatchers awarded positions under terms of the agreement shall be placed on the job within seven days after appointment or be paid overtime rates for each day's delay beyond that.

1942 Commodity Statistics by Geographical Areas

The Interstate Commerce Commission's Bureau of Transport Economics and Statistics has made public its statement No. Q-550 for the year 1942, showing for Class I roads the tons of revenue freight originated and terminated in carloads by classes of commodities and by geographical areas. The commodity-group figures total to 1,403,611,665 tons originated and 1,359,328,226 tons terminated, while last year's forwarder traffic is shown to have amounted to 3,242,152 tons originated and 3,374,664 tons terminated.

The "geographical areas" breakdown is by states, except that the six New England states are grouped together. The big originator and terminator is Pennsylvania, where 234,963,807 tons originated and 180,351,547 tons terminated. These are the commodity-group totals for Pennsylvania which also originated and terminated forwarder traffic amounting to 168,869 tons and 108,002 tons, respectively. Pennsylvania did not, however, lead in forwarder traffic, the big originator there being New York with 973,714 tons, and the big terminator Illinois with 589,124 tons.

Illinois also led the originator and terminator of products agriculture (12,068,350 tons and 12,076,793 tons, respectively); and as the originator of animals and products—2,983,672 tons. New York's 2,564,539 tons was the biggest total for animals and products terminated. Pennsylvania led the products of mines group with 173,624,152 tons originated and 120,548,251 tons terminated; and in manufactures and miscellaneous with 58,343,546 tons originated and 48,282,482 tons terminated. Oregon originated the greatest tonnage in the products of forests group (10,897,086), while Washington with 8,678,026 tons was the leading terminator.

Standardization of Diesel-Electric Switchers

Standardization of Diesel-electric switching locomotives is here to stay, according to a statement made by G. W. Wilson, manager, transportation department, General Electric Company, in which he says: "It offers the ultimate user too much in terms of proved performance, quick delivery, low price and simplified maintenance for him to revert to the pre-war practice of a special design for every occasion. Locomotive manufacturers will revise the standard designs periodically to

Selected Income and Balance-Sheet Items of Class I Steam Railways

Compiled From 132 Reports (Form IBS) Representing 136 Steam Railways by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission

(Switching and Terminal Companies Not Included)

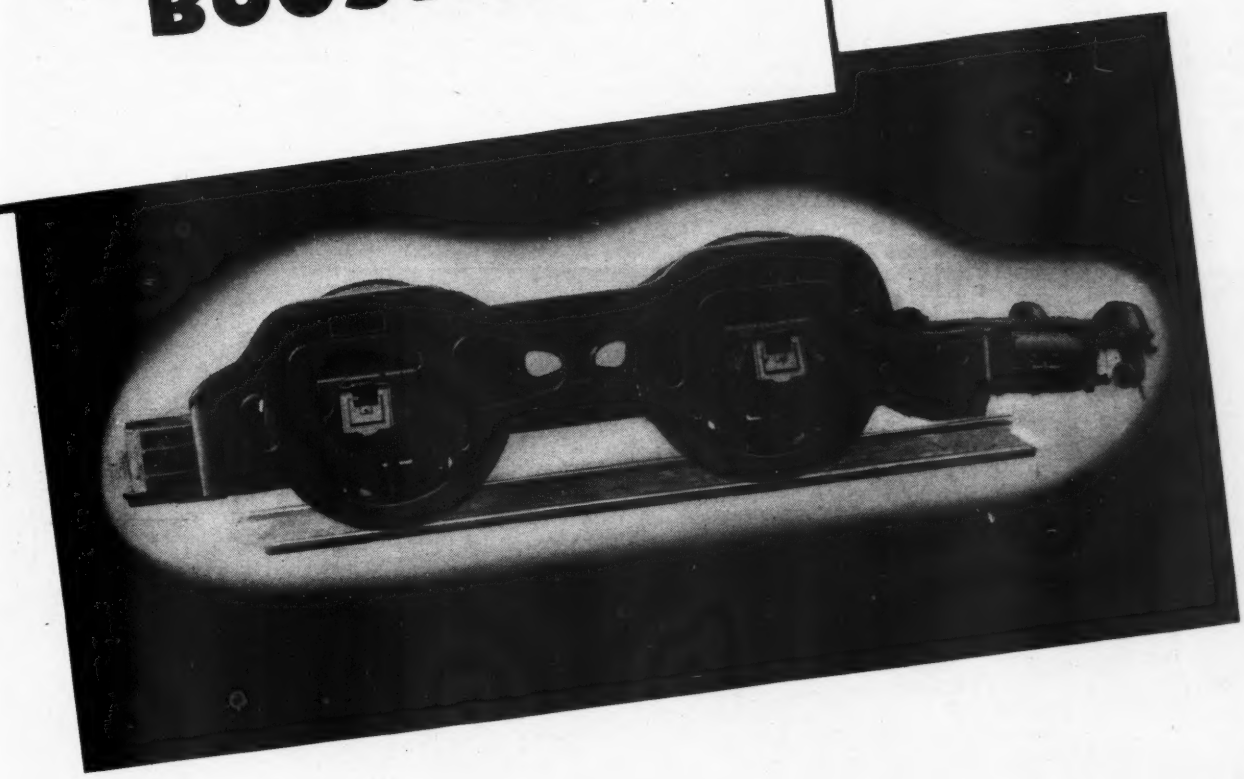
Income Items	All Class I Railways — For the month of March 1943	For the month of March 1942	For the three months of 1943	For the three months of 1942
1. Net railway operating income	$129,647,037	$90,571,693	$341,059,767	$221,681,981
2. Other income	12,054,855	11,562,429	35,932,263	35,231,900
3. Total income	141,701,892	102,134,122	376,992,030	256,913,881
4. Miscellaneous deductions from income	2,541,461	2,549,206	6,801,170	7,296,524
5. Income available for fixed charges	139,160,431	99,584,916	370,190,860	249,617,357
6. Fixed charges:				
6-01. Rent for leased roads and equipment	15,335,350	15,067,571	43,824,221	40,883,749
6-02. Interest deductions[1]	36,686,862	37,035,288	109,659,959	111,112,604
6-03. Other deductions	130,616	121,707	379,495	356,077
6-04. Total fixed charges	52,152,828	52,224,566	153,863,675	152,352,430
7. Income after fixed charges	87,007,603	47,360,350	216,327,185	97,264,927
8. Contingent charges	2,356,518	2,251,299	6 877,465	6,694,122
9. Net income	84,651,085	45,109,051	209,449,720	90,570,805
10. Depreciation (Way and structures and Equipment)	26,545,996	19,695,109	79,496,951	56,285,337
11. Amortization of defense projects	10,486,118	5,466,914	30,346,987	13,370,220
12. Federal income taxes	120,727,240	41,631,043	303,845,980	87,886,492
13. Dividend appropriations:				
13-01. On common stock	5,176,214	4,154,215	22,871,202	19,252,803
13-02. On preferred stock	314,042	85,223	5,525,963	5,155,093
Ratio of income to fixed charges (Item 5 ÷ 6-04)	2.67	1.91	2.41	1.64

Selected Asset and Liability Items	All Class I Railways — Balance at end of March 1943	Balance at end of March 1942
20. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	$544,958,245	$464,740,713
21. Cash	1,064,818,686	735,817,040
22. Temporary cash investments	938,908,071	127,658,511
23. Special deposits	170,943,252	183,405,552
24. Loans and bills receivable	342,399	1,073,350
25. Traffic and car-service balances—Dr.	47,081,927	38,616,685
26. Net balance receivable from agents and conductors	168,784,824	93,813,186
27. Miscellaneous accounts receivable	507,255,921	245,200,631
28. Materials and supplies	515,212,263	519,589,679
29. Interest and dividends receivable	18,467,911	18,839,193
30. Rents receivable	1,190,379	1,142,746
31. Other current assets	14,839,991	25,527,795
32. Total current assets (items 21 to 31)	3,447,845,724	1,990,684,368
40. Funded debt maturing within 6 months[2]	$122,472,661	$92,151,970
41. Loans and bills payable[3]	17,426,396	18,691,318
42. Traffic and car-service balances—Cr.	122,546,153	65,761,408
43. Audited accounts and wages payable	357,310,341	303,695,016
44. Miscellaneous accounts payable	85,715,780	53,168,028
45. Interest matured unpaid	70,800,521	77,958,536
46. Dividends matured unpaid	16,766,763	13,580,947
47. Unmatured interest accrued	64,665,499	73,887,430
48. Unmatured dividends declared	10,223,451	5,497,776
49. Unmatured rents accrued	22,186,652	21,155,525
50. Accrued tax liability	1,146,906,420	399,881,062
51. Other current liabilities	64,127,557	55,720,829
52. Total current liabilities (items 41 to 51)	1,978,675,533	1,088,997,875
53. Analysis of accrued tax liability:		
53-01. U. S. Government taxes	1,019,806,494	283,658,757
53-02. Other than U. S. Government taxes	127,099,926	116,222,305

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.
[3] Includes obligations which mature not more than 2 years after date of issue.
(Subject to revision.)

News Department continued on next left-hand page

LOCOMOTIVE BOOSTERS*



HAVE ADDED MILLIONS OF POUNDS OF DRAW-BAR PULL

Thousands of locomotives in war-time service have from 10,000 to 15,000 lbs more draw-bar pull to help them in starting the heavier trains and accelerating them to road speed. The Locomotive Booster supplies this power.

Here is a substantial contribution to hauling power that is helping in the achievement of new records by American railroads in the handling of the nation's war-time traffic.

*Trade Mark Reg. U. S. Pat. Off.

FRANKLIN RAILWAY SUPPLY COMPANY, INC. NEW YORK CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

incorporate the latest developments—may even have locomotive shows to introduce their new models." He estimates that standardization of G-E switching locomotives and carefully planned production added more than 185 locomotive years of switching to the war effort in 1942.

According to Mr. Wilson, a special locomotive built to customers' specifications requires time-consuming design work, engineering and drafting before material can be ordered and the shop can start work. Then special tools and fixtures are often required. As long as a year may elapse between placing the order and shipment of "tailor-made" locomotives.

On the other hand, the design work and drafting is already completed for standard locomotives, and the factory is tooled up for production. Consequently, the time between the order and shipment can easily be cut in half.

Moreover, this vital gain in time sacrificed nothing in performance and released valuable skilled man-hours for other war work, to say nothing of simplified maintenance. The standard locomotive had already proved itself in hundreds of installations, and it was simply a matter of ordering the proper size to do the job.

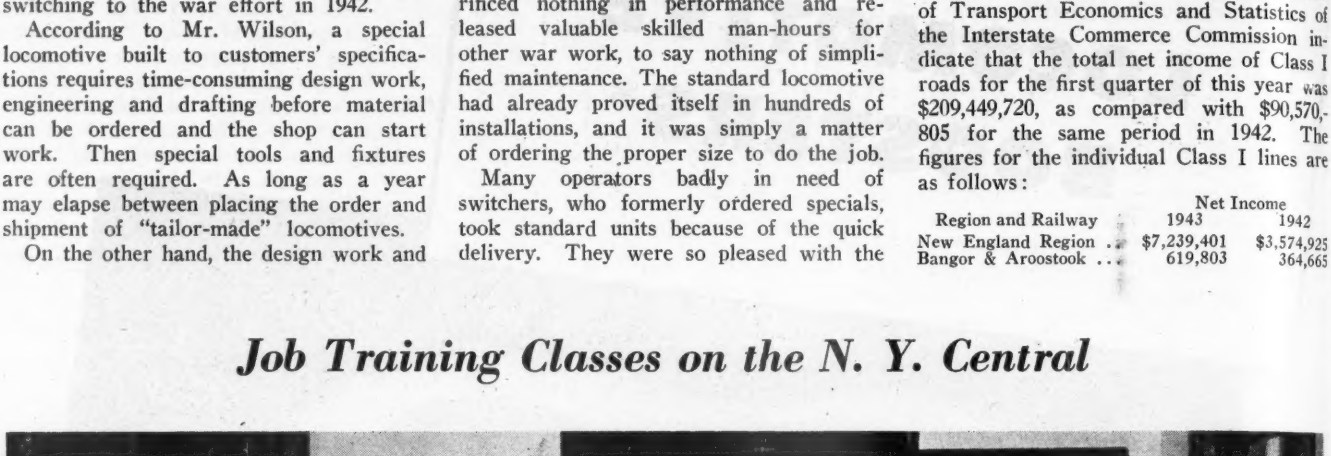
Many operators badly in need of switchers, who formerly ordered specials, took standard units because of the quick delivery. They were so pleased with the performance that they henceforth ordered standard units.

Comparative Figures on First Quarter Net Income

Figures recently released by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission indicate that the total net income of Class I roads for the first quarter of this year was $209,449,720, as compared with $90,570,805 for the same period in 1942. The figures for the individual Class I lines are as follows:

Region and Railway	Net Income 1943	1942
New England Region	$7,239,401	$3,574,925
Bangor & Aroostook	619,803	364,665

Job Training Classes on the N. Y. Central



ABOVE: A Class in Job Methods —Instruction in Making Most Effective Use of Materials, Machines and Labor. Instructors Are Industrial Experts, Supplied by the War Manpower Commission.

RIGHT: A Class in Office Management, Instructor Selected by Manhattan College and Expense Borne by U. S. Office of Education.

Employees Who Are Taking Such Courses Range from Mechanics, Clerks and Draughtsmen Up to Holders of Important Supervisory Positions.

Boston & Maine		1,842,449		1,085,738
Canadian National in N. E.	d	395,757	d	267,162
Canadian Pacific in Vt.		.....		.....
Central Vermont	d	206,328	d	213,813
International of Maine		.....		.....
Maine Central		538,831		330,951
New York Connecting		137,811		269,208
New York, N. H. & H.†		4,741,218		2,008,006
Rutland*	d	38,626	d	2,668
Great Lakes Region		30,798,393		13,067,535
Ann Arbor		100,976		22,903
Cambria & Indiana		127,522		218,953
Delaware & Hudson		958,461		1,031,270
Delaware, Lack. & Wn.		1,377,689		324,328
Detroit & Mackinac	d	11,731	d	1,784
Detr. & Tol. Shore Line		311,873		223,430
Erie		2,418,546		2,189,748
Grand Trunk Western		803,549	d	520,419
Lehigh & Hudson River		97,352		133,297
Lehigh & New England		235,323		181,673
Lehigh Valley		1,520,707		157,131
Monongahela		167,399		219,047
Montour		175,164		124,227
New York Central[1]		16,101,419		4,367,883
New York, Chi. & St. L.		2,282,639		2,512,100
New York, Ontario & Wn.†	d	423,540	d	422,679
New York, Susq. & Wn.†		138,484	d	19,635
Pere Marquette		1,237,421		335,226
Pittsburgh & Lake Erie		1,102,871		855,124
Pittsburg & Shawmut	d	47,853	d	41,428
Pittsburgh & W. Va.		230,826		186,795
P., Shawmut & N.*		4,653	d	4,234
Wabash		1,888,643		994,579
Central Eastern Region		23,551,910		6,848,917
A., C. & Y.†		66,863		25,495
Baltimore & Ohio		9,693,150		4,010,827
Bessemer & Lake Erie	d	695,442	d	684,447
Central of New Jersey†		400,607	d	42,756
Chicago & Eastern Ill.		871,682		226,125
Chicago & Ill. Midland		181,803		130,954
C., I. & L.†		489,224		165,173
D., T. & I.		653,558		475,861
Elgin, Joliet & Eastern		182,642		667,910
Illinois Terminal		206,053		261,344
Long Island	d	502,936	d	465,118
Missouri-Illinois†		84,886		118,454
Pennsylvania		6,899,643	d	457,311
Penn.-Rdg. S'shore Lines	d	605,394	d	762,375
Reading		3,322,154		1,987,126
Staten Island R. T.		.....		.....
Western Maryland		1,529,556		662,927
Wheeling & Lake Erie		773,861		528,728
Pocahontas Region		15,547,117		13,023,983
Chesapeake & Ohio		7,727,130		5,813,163
Norfolk & Western		5,387,579		4,813,218
R., F. & P.		1,092,225		1,048,676
Virginian		1,340,183		1,348,926
Southern Region		41,320,654		22,344,013
Alabama Great Southern		569,848		388,704
Atlanta & West Point		130,482		71,940
A., B. & C.		252,411		23,046
Atlantic Coast Line		5,786,367		4,794,105
Central of Georgia†		1,219,174		125,202
C. & W. C.		215,603		150,540
C., N. O. & T. P.		1,128,753		806,040
Clinchfield		1,013,734		748,967
Columbus & Greenville		45,320		6,077
Florida East Coast†		2,030,614		584,833
Georgia		914,723		451,834
Georgia & Florida*	d	149,084	d	159,567
G. S. & F.		186,971		91,618
Gulf & Ship Island	d	4,297		51,484
Gulf, Mobile & Ohio		975,348		395,757
Illinois Central		6,265,930		2,094,037
Louisville & Nashville		4,400,503		3,348,809
Mississippi Central		15,085	d	11,656
N., C. & St. L.		1,710,302		276,156
New Orleans & N'eastern		261,307		243,847
Norfolk Southern		131,681		119,735
Seaboard Air Line*[2]		7,902,197		2,042,499
Southern		4,924,436		3,575,312
Tennessee Central		115,629		14,635
Western of Alabama		154,013		103,246
Yazoo & Miss. Valley		1,123,604		2,006,813
Northwestern Region		13,972,881	d	1,278,145
Chicago & N. Western†		2,720,406	d	684,751
Chicago Great Western		597,367		339,186
C., M., St. P. & P.†		8,003,329		1,888,375
C., St. P., M. & O.		378,499	d	275,812
D., M. & I. R.	d	2,901,071	d	1,962,171
D., S. S. & A.†	d	115,356	d	111,587
D., W. & P.	d	68,008	d	62,397
Great Northern		1,991,333	d	91,959
Green Bay & Western		173,415		109,401
Lake Superior & Ish.	d	270,824	d	126,049
Minneapolis & St. Louis*		162,448	d	12,374
M., St. P. & S. Ste. M.†	d	1,108,481	d	1,348,884
Northern Pacific		3,258,481		898,874
Spokane International		68,760	d	2,083
S., P. & S.		1,082,583		164,086
Central Western Region		53,216,371		22,528,811
Alton†		1,289,177		383,885
A., T. & S. F.[3]		12,575,641		8,764,873
C., B. & Q.		9,920,481		3,590,903
C., R. I. & P.†		8,818,028		2,310,151
Colorado & Southern		543,100		156,007
Colorado & Wyoming		49,963		69,128
D. & R. G. W.†		2,473,819		463,340
Denver & Salt Lake		233,398		143,151
Ft. W. & D. C.		425,613		167,591
Nevada Northern		43,435		39,821
Northwestern Pacific	d	182,270	d	411,519
Southern Pacific		2,817,285		717,095
Southern Pacific System[4]		19,442,273		10,608,767
T., P. & W.[5]		535,750	d	85,381
Union Pacific		12,609,166		5,824,739
Utah		28,313		4,929
Western Pacific†		1,035,472		390,098
Southwestern Region		23,802,993		10,460,766
B., Sour Lake & W.†		255,939		594,104
Burlington-Rock Island	d	55,820	d	166,241
Int.-Great Northern†		568,866	d	294,943
Kansas City Southern		1,176,797		813,032
Kansas, Oklahoma & Gulf		266,638		89,430
Louisiana & Arkansas		361,315		333,089
Midland Valley		60,242	d	17,762
Missouri & Arkansas		47,599		26,248
Missouri-Kansas-Texas		1,600,977		574,679
Missouri Pacific†		6,876,942		2,110,495
N. O., T. & M.†	d	195,054		99,573
Oklahoma City-Ada-Atoka		61,834		57,837
St. L., B. & M.†		710,069		944,930
St. Louis-San Francisco†		2,528,718		457,742
St. L., S. F. & Texas		209,313		7,752
St. Louis Southwestern†		1,359,048		1,196,454
S. A., Uvalde & G.†	d	62,825	d	164,074
Texas & New Orleans		6,397,937		2,776,122
Texas & Pacific		1,448,774		953,280
Texas Mexican		185,684		69,019

* Report of receiver or receivers.
† Report of trustee or trustees.
d Deficit.
[1] Includes Boston & Albany, lessor.
[2] $1,053,692 included contrary to instructions of the Interstate Commerce Commission.
[3] Includes Atchison, Topeka & Santa Fe, Gulf, Colorado & Santa Fe and Panhandle & Santa Fe.
[4] Data not included in totals. Includes Southern Pacific Company, Texas and New Orleans R. R. Co., and leased lines.
[5] Operated by Federal Manager.

New Color Scheme for C. N. R. Reefers

The first Canadian National overhead ice refrigerator car to be decorated with the company's new color scheme for this type of equipment was recently turned out by the road's car shop at Point St. Charles and placed on exhibition at Bonaventure station, Montreal.

The car has been painted with a brine-resistant and heat-repellent paint and, instead of the conventional "box car red," the sides, ends and roof are finished in gray, with lettering, maple leaf monogram and slogan, trucks and underframe in contrasting red.

To date, about 200 of these new type cars have been placed in service on the C. N. R. Another 100 are now being built and an order for 200 more has just been placed.

The construction work is being done at the company's Transcona shop at Winnipeg. The all-steel cars are 40 ft. long; 6 ft. 7 in. in height; 8 ft. 5 in. wide, and of 50 tons' capacity. Each car is equipped with eight overhead ice bunkers to maintain even car temperatures.

It is understood that all similar cars of this design now in service will be repainted to conform to the new color scheme as they are returned to the shops.

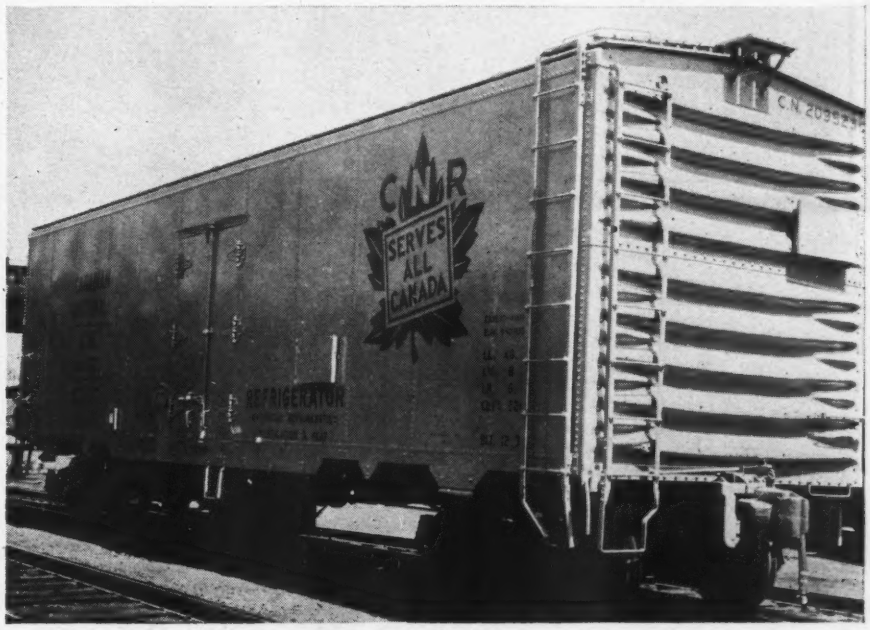
The brine-resisting and heat-repellent paint used on the cars was developed by E. R. Battley, chief of motive power and car equipment, and G. E. McCoy, assistant chief of car equipment of the road. The paint, in addition to conserving ice and providing more efficient refrigeration during extremely hot weather, will prevent corrosion and add to the life of the car.

It is reported that recently one of these reefers carried a load of 92,400 lb. of frozen hog livers in a single shipment over the road's transcontinental route.

The Army-Navy "E" award, for high achievement in producing materials needed for war, was awarded the men and women employees of the **Mall Tool Company,** Chicago, in a ceremony at the plant on June 22.

Construction

BALTIMORE & OHIO.—This road has applied to the Interstate Commerce Commission for authority to extend into a "branch line to be operated in interstate and foreign commerce" a side track which it has under construction along the Gauley river in Nicholas County, W. Va. The present construction extends 2.46 miles along the river from a point near Curtin, and the application seeks authority to build 2.77 miles additional and to go further up to



C.N.R. Photo

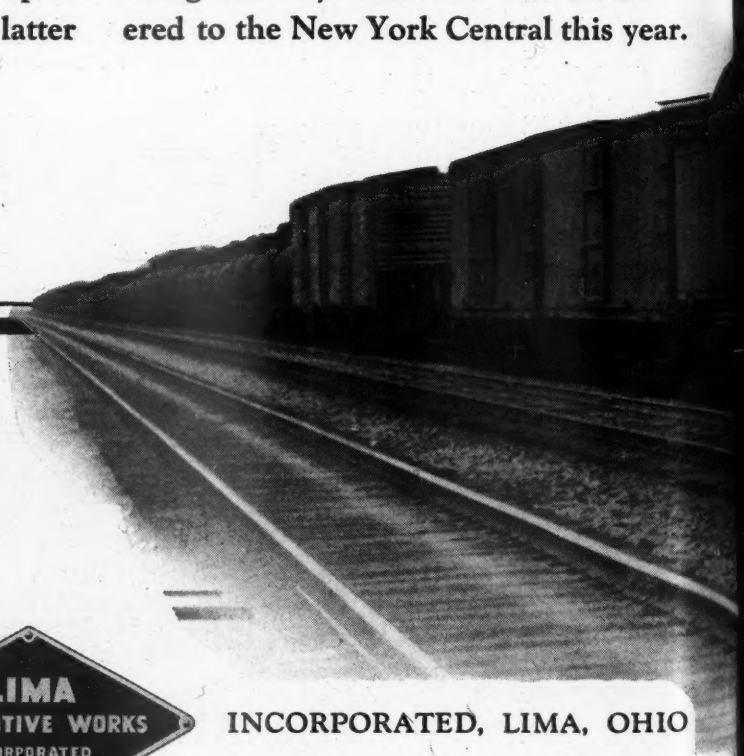
One of the C.N.R.'s New Type Reefers Decorated in the New Color Scheme

NEW, VERSATILE

★ For the all-important task of handling the tremendous load of war traffic between Chicago and New York, The New York Central Railroad depends upon modern, efficient steam locomotives, many of which are Lima-built.

Late in 1940 this road placed in service 15 Lima-built general service, 4-8-2 type locomotives, designated the L-3b Class. With ever-increasing demands being placed on its motive power supply, The New York Central again called upon Lima power, purchasing, in the latter part of 1942, 25 more 4-8-2 type locomotives, known as the L-4a Class. They were duplicates of the L-3b Class except in two important respects: the driving wheel diameters were increased from 69 to 72" and the cylinders from 25-1/2 to 26", thus increasing their speed while maintaining tractive force.

These locomotives have performed so satisfactorily in universal road service that 25 additional L-4a units are now being built by Lima and will be delivered to the New York Central this year.



LIMA LOCOMOTIVE WORKS — LIMA LOCOMOTIVE WORKS INCORPORATED — INCORPORATED, LIMA, OHIO

LIMA POWER IN SERVICE

ON THE NEW YORK CENTRAL SYSTEM

a point near Persinger Ford when and as coal properties along the route are developed.

CHICAGO, ROCK ISLAND & PACIFIC.—Federal Judge Michael L. Igoe at Chicago has authorized trustees of the Rock Island to convert the road's warehouse at St. Paul, Minn., into a modern fruit and produce terminal at an estimated cost of $261,850.

EMORY RIVER.—This company has been authorized by the Interstate Commerce Commision to rehabilitate a 6-mile private logging road from Lancing, Tenn., to Gobey, and to construct a 9-mile extension to reach undeveloped coal deposits. The 56-lb. rail in the existing line will be replaced with 85-lb. rail, which also will be used in the new work.

WAR DEPARTMENT.—The U. S. Engineer office, Jacksonville, Fla., has awarded a contract, amounting to less than $50,000, to the Okeechobee Construction Company, Jacksonville, for the reconstruction of railroad trestles in Florida. The U. S. Engineer office, Atlanta, Ga., has awarded a contract, amounting to less than $50,000, to W. M. Blount and C. B. Blount, Union Springs, Ala., for replacing track in Alabama. The U. S. Engineer office, Mobile, Ala., has awarded a contract, amounting to less than $50,000, to the C. G. Kershaw Construction Company, Birmingham, Ala., for the construction of railroad tracks in Mississippi.

Abandonments

ILLINOIS CENTRAL.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon a 0.1-mile interchange track within the corporate limits of Chatsworth, Ill., and in addition to abandon operation of a 0.03-mile segment of the same track owned by the Toledo, Peoria & Western.

MISSOURI-KANSAS-TEXAS.—This road's subsidiary, the Missouri-Kansas-Texas of Texas, has applied to the Interstate Commerce Commision for authority to abandon a segment of its main line from a point near Pottsboro, Tex., to a point near Sadler, 8.82 miles, as the result of a relocation of line, constructed at the expense of the federal government of approximately equal length, occasioned by the development of a reservoir.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—The Interstate Commerce Commission, by Commissioner Porter, has extended to July 23 the effective date of its order authorizing this road to abandon its line from Kingston, Ga., to Rome, 17.7 miles.

SOUTHERN.—The Carolina & Tennessee Southern, the stock of which is owned by this company, has applied to the Interstate Commerce Commission for authority to abandon its entire line from Bushnell, N. C., to Fontana, 13.96 miles.

Equipment and Supplies

Russia Here for "Enormous" Locomotive Order

The Russians are in this country for an "enormous order" for locomotives, Major General C. P. Gross, chief of the Army's Transportation Corps, recently told a House appropriations subcommittee which was considering the Military Establishment Appropriation Bill for the fiscal year ending June 30, 1944. This statement together with General Gross' next remark on how all the lend-lease countries "want our material" prompted Representative Starnes, Democrat of Alabama, to observe that he did not wonder, because "it is superior equipment and they acquire it without cost."

General Gross did not say how many locomotives are involved in the Russian request, but he did reveal that this country has sent "quite a little" rolling stock to the Middle East. He went on to say that the shipping route to the Persian Gulf, and up to the Russian front there is being "highly developed"; and "approximately $35,000,000 worth of rolling stock has either been shipped from American ports to the Near East, or is in part being held at the ports ready for shipment."

"This rolling stock," General Gross added, "has gone to many different places and is now being utilized to make up the shortage that was apparent in several locations." He also revealed that the United States "sent some hundred locomotives to Africa prior to the fall of Tunisia." Speaking briefly about Brigadier General Carl R. Gray's Military Railway Service on the African front, General Gross called the outfit "a nicely balanced unit" of "some 6,000" railway troops.

LOCOMOTIVES

THE BALDWIN LOCOMOTIVE WORKS will build 695 locomotives this year as compared with 277 manufactured in 1942, according to Ralph Kelly, president of the corporation.

SIGNALING

THE DENVER & RIO GRANDE WESTERN has placed a contract with the General Railway Signal Company for the materials for the installation of coded centralized traffic control on the single track line from Sphinx, Utah, to Helper, a distance of 68 miles. This territory will be controlled by an addition to an existing control machine located at Green River, which now controls the 64 miles of coded centralized traffic control territory between Sphinx and Agate. The order includes 23 Model 5D switch machines, 15 w-arm type D high signals, 9 3-arm type D high signals, 32 type SA dwarf signals, 23 bungalows, 24 junction boxes, 700 type-K relays, 208 type B and BT rectifiers, 72 type-K transformers, and 4 model-9A outlying electric switch locks in addition to 7 new panels required to make the necessary addition to the existing control machine.

THE DULUTH, MISSABE & IRON RANGE has placed an order with the Union Switch & Signal Co. for the material involved in a centralized traffic control installation between Iron Jct., Sparta Jct., Keenan, Wolf and Spruce Jct., Minn. A style C control machine will be located at Iron Jct. and arranged to control the entire territory. All high signals will be of the style H-2 searchlight type, with dwarf signals style H-2, and color light signals style N-2, with switch movements of the style M-22B dual control low voltage type. The field installation work will be carried out by the railway company's regular signal construction forces.

Supply Trade

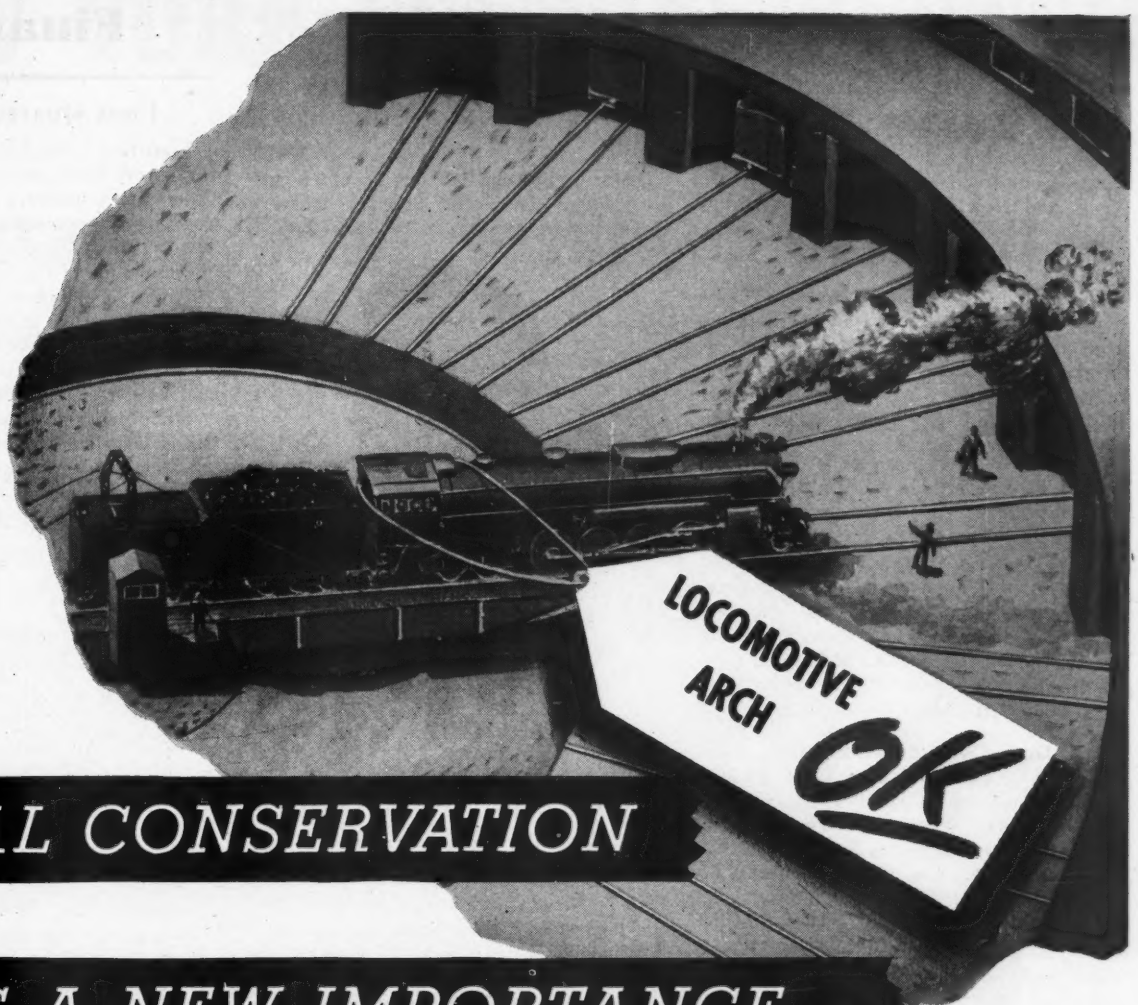
C. K. Swafford, works manager and member of the board of directors of the **Gisholt Machine Company,** has been elected a vice-president of the company.

William B. Gillies, vice-president of the **Youngstown Sheet & Tube Co.,** Youngstown, Ohio, died in that city on June 20.

C. T. Hansen & Company, for twelve years representative in Detroit, Mich., of the **Lukens Steel Company,** has been appointed Pacific coast sales representative of the Lukens Company and its subsidiaries, the By-Products Steel Corporation, and Lukenweld, Inc., Coatesville, Pa. Offices have been opened by the Hansen Company at 530 West Sixth street, Los Angeles, Calif; 235 Montgomery street, San Francisco, Calif., and 1319 Second

C. T. Hansen

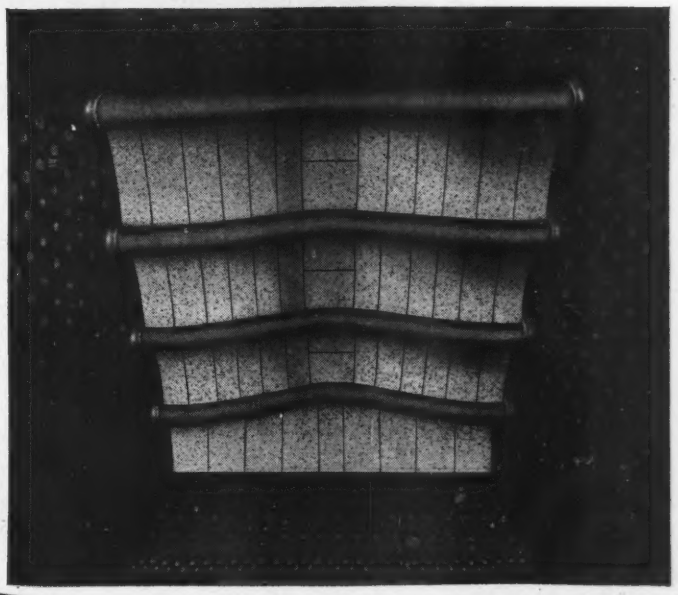
News Department continued on next left-hand page



COAL CONSERVATION HAS A NEW IMPORTANCE

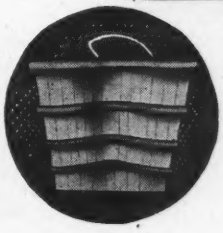
When you burn a ton of coal today you are burning the man-hours used in mining, transporting and handling it. Man-hours that are needed in the war effort.

So today coal conservation takes on a new importance. One way of furthering it is to be sure that every locomotive leaving the roundhouse has a *complete* arch in its firebox.



HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists



AMERICAN ARCH CO.
INCORPORATED
60 EAST 42nd STREET, NEW YORK, N. Y.
Locomotive Combustion Specialists

avenue, Seattle, Wash. **C. T. Hansen,** president, who has established residence in San Francisco, is in charge of these offices.

The H. K. Porter Company, of Pittsburgh, Pa., has purchased the Quimby Pump Company, with plants at Newark, N. J., and New Brunswick. The Quimby plants will be operated as a division of the Porter company.

Army and navy officers and the Governor of Indiana attended the ceremonies held in connection with the presentation of the Army-Navy "E" burgee to the Indianapolis, Ind., works of the **National Malleable and Steel Castings Company** on June 25.

Gail E. Spain, vice-president in charge of operations at San Leandro, Cal., for the **Caterpillar Tractor Company,** Peoria, Ill., has been appointed vice-president in charge of the advertising, sales, export, engine sales, specia' products and war contracts departments, with headquarters at Peoria, succeeding **D. A. Robison,** who has resigned to becime Caterpillar distributor at Salt Lake City, Utah.

The **Dow Chemical Company,** Midland, Mich., has reorganized its Plastic Sales division and formed a Plastic Development and Service division. **D. L. Gibb,** who has been affiliated with the company for the last 20 years, has been made manager of the Plastics Sales division and **W. O. Goggin,** who during the seven years he has engaged in research on resins and plastics, has been placed in charge of the Plastic Development and Service division.

The annual report of the **Pettibone Mulliken Corporation,** Chicago, for the fiscal year ended March 31, 1943, shows a net profit of $466,347 after all charges and federal income taxes and a reserve of $250,000 for contingencies, as compared with a net of $436,806 for the preceding year. Sales for the year amounted to $12,914,058, a gain of 79 per cent over those of $7,223,601 for the previous 12-months period. Shipments of regular line products for the past year, exclusive of ordnance manufacturing were about 30 per cent ahead of the previous year, the report states. The company has been given the Army-Navy "E" award for excellence in production.

The annual report of the **American Rolling Mill Company,** Middletown, Ohio, for 1942 shows a net income of $7,780,988 on a record volume of business whereon net sales reached a new high of $180,978,867 compared with $169,178,239 in 1941. The largest tax bill in the company's history, higher labor costs and a refund of $2,500,000 to the government, as the result of the renegotiation of contracts, accounted for the decline in earnings from a net income of $11,228,475 in 1941 to $7,780,988 in 1941, according to the report. In a section of the report entitled The Second War Year, the company's progress in helping the nation's war effort is reviewed. Among the work cited is research on cartridge case steel, the development of an all-wood culvert to conserve iron and steel for more urgent war needs, the production of face-hardened armor plate, aircraft propeller steel and prefabricated ship parts.

John C. Sykora has been appointed vice-president of the **Gould Storage Battery Corporation,** Depew, N. Y., and **Roy J. Stanton,** motive power sales manager. Mr. Sykora has been with the Gould organization for nearly a quarter of a century, having entered the New York office in 1919. Eight years later he was transferred to Depew as assistant to the general sales manager. Mr. Sykora has made his headquarters in Depew since 1927, except for one year when he acted as special representative of the Gould Company in Washington, D. C. He was appointed sales manager in 1940, which position he has held until his present appointment.

John C. Sykora

Mr. Stanton, formerly employed for a number of years by the United States Light & Heat Corporation, became a member of the Gould sales force when Gould took over the industrial division of U. S. L. He first covered several different territories for Gould and later assumed charge of the company's Detroit office. In his new position he will make his headquarters at Depew.

Roy J. Stanton

Financial

First Quarter Dividends

Statistics compiled by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission and recently released indicate that the dividend appropriations of Class I roads for the first three months of this year amounted to $28,397,165, as compared with $24,407,896 for the same period last year. The total federal income taxes of Class I roads in the same period were, in 1943, $303,845,980, and in 1942, $87,886,492.

Dividend appropriations by individual roads are tabulated below (roads not listed made no appropriation for dividends during the first quarter):

Railway	First Quarter 1943	First Quarter 1942
Atch., Topeka & Santa Fe	$3,640,590	$2,427,060
Bangor & Aroostook	95,700	.....
Cambria & Indiana	60,000	60,000
Chesapeake & Ohio	5,895,535	5,895,525
Chicago Great Western	228,819	.....
Cinc., New Orl. & T. P.	30,668	30,668
Detr. & Tol. Shore Line	60.000	60,000
Erie	1,969,062	1,949,961
Green Bay & Western	125,000	125,000
Lake Sup. & Ishpeming	.....	107,100
Lehigh & Hudson River	70,605	70,605
Louisiana & Arkansas	75,000	75,000
Louisville & Nashville	2,340,000	2,340,000
Maine Central	27,240	.....
Norfolk & Western	3,516,208	3,516,208
Reading	1,049,496	1,049,496
Southern	2,596,400	.....
Union Pacific	5,325,227	5,325,227
Virginian	781,788	781,788
Wheeling & Lake Erie	509,827	594,258

CENTRAL OF NEW JERSEY. — *Interest Hearing Postponed*—Because of pending litigation over the railroad's tax liability, the United States district court at Newark, N. J., on June 21, postponed indefinitely action on a petition by a group of Central of New Jersey bondholders calling on the railroad to pay one year's interest to holders of its 4 and 5 per cent general mortgage bonds. The bondholders' protective committee had contended that the road made a substantial profit in the past two years, but that bondholders had received no interest since 1939.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC. — *Reorganization.* — One of the final steps in the reorganization of this company was taken on June 22, when the Federal District Court at Chicago, in keeping with a United States Supreme Court decision, designated which bondholders hold prior liens on 17 pieces of railroad property. The Supreme Court, on March 15, approved the reorganization plan, except for the 17 pieces of property involved in a dispute which it referred to the District Court for settlement. The District Court ruled that the road's general mortgage of 1889 has the first lien on 2.91 miles of track between Nekoosa Junction, Wis., and Nekoosa, and that the remaining 16 pieces purchased after 1889, and consisting of extensions, additions and connections, are controlled by the first and refunding mortgage of 1925.

COLORADO & SOUTHERN.—*Indebtedness.*—The United States District Court at Denver, Colo., has authorized this railroad and its subsidiary, the Ft. Worth & Denver City, to devote $4,000,000 to the retire-

News Department continued on next left-hand page

NEW YORK CENTRAL SYSTEM

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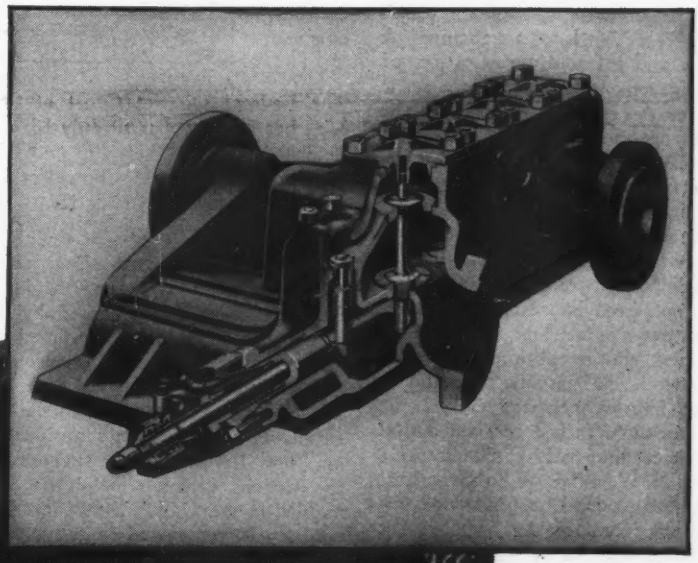
2 — Located between superheater and cylinders, providing better control and instant response.



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AMERICAN THROTTLE COMPANY, INC.
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ment of indebtedness, including $2,000,000 for the purchase by the C. & S. of 4½ per cent general mortgage bonds due in 1980, $1,015,700 for the purchase by the C. & S. of its refunding and extension mortgage bonds from the Reconstruction Finance Corporation at par and accrued interest and $1,000,000 for the purchase of these bonds by the F. W. & D. C.

DELAWARE, LACKAWANNA & WESTERN. —*Approves Merger with N. Y. L. & W.*— The Delaware, Lackawanna & Western on June 10 authorized its conferees negotiating for a merger with one of its leased lines, the New York, Lackawanna & Western, to proceed with preparation of a merger agreement, designed to settle litigation over the question of whether the D. L. & W. or holders of the leased line stock are liable for federal income tax payments on dividends or interest paid to leased line stockholders. Under the plan of merger, as proposed, holders of $10,000,000 of outstanding stock of the N. Y. L. & W. are to receive $6,000,000 in new 5 per cent fixed interest first and refunding mortgage bonds and $4,000,000 in new 5 per cent contingent interest second mortgage bonds. The first mortgage bonds are to bear interest retroactively to the date when stockholders last received rental payments. According to L. P. Stack, president of the N. Y. L. & W., the general effect of the plan would be for each company to shoulder half of the disputed tax liability of $1,200,000. The effective date of the merger agreement would be July 1, 1943.

The New York, Lackawanna & Western was leased in perpetuity by the Delaware, Lackawanna & Western in 1882 at an annual rental of 5 per cent on the capital stock and bond interest, the lessee assuming all outstanding liabilities and receiving all assets. In addition to the $10,000,000 of capital stock, the N. Y. L. & W. has outstanding $13,639,000 of 4 per cent, series A and $10,000,000 of 4½ per cent, series B first and refunding mortgage bonds due in 1973 and the plan of merger proposes broad sinking fund provisions to apply to these currently outstanding bonds as well as the new issues.

DULUTH, SOUTH SHORE & ATLANTIC.— *New Trustee.*—P. L. Solether has applied to the Interstate Commerce Commission for ratification of his appointment by the federal district court as trustee of this road and its subsidiary, the Mineral Range.

EMORY RIVER.—*Acquisition and Construction.*—Division 4 of the Interstate Commerce Commision has authorized this company to acquire and rehabilitate a private logging road from Lancing, Tenn., to Gobey, about 6 miles, and to construct a 9-mile extension thereof to reach undeveloped coal deposits.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—*Reorganization.*—The final legal step in the reorganization of this railroad was taken on June 19, when the Federal district court at Minneapolis, Minn., approved the plan submitted by the trustees on March 19, 1941. The plan had been approved previously by the Interstate Commerce Commission on June 17, 1942, and by the Federal Court, as to general provisions, on November 13, 1942.

Under the order entered on June 19, 1943, three principal groups of bondholders, consisting of insurance companies, mutual savings banks, and the Canadian Pacific were given 10 days in which to submit nominations for three reorganization managers, one to represent each group. The court will approve or disapprove the nominations and upon approval the reorganization managers will set up a new corporation. Meantime, operations will continue in the hands of the present management.

MISSOURI PACIFIC. — *Reorganization.* — The Federal District Court at St. Louis, Mo., has continued until July 16, a hearing to determine whether the reorganization plan of the Interstate Commerce Commission should be approved or returned to that body for revision.

SEABOARD AIR LINE.—*Reorganization.*— The proposed recapitalization plan for the Seaboard Air Line prepared by Tazewell Taylor, special master appointed to expedite reorganization of the company, received the general approval, with minor exceptions, of groups interested in the reorganization at a hearing held at Norfolk, Va., on June 16, to receive suggestions from the various interests involved. The plan as filed in the United States district courts on June 1 recommends a capitalization for the reorganized company of $196,870,000 as of January 1, 1944, with total annual charges amounting to $6,808,500. This capitalization would replace total principal and interest of claims in hands of the public, adjusted to January 1, 1944, amounting to $330,381,125. The new capitalization would include $11,870,000 of receivers' equipment trust certificates now outstanding, to be assumed by the reorganized company; $32,500,000 of first mortgage, 40-year, series A, 4 per cent bonds; $52,500,000 of 50-year, 4½ per cent, series A income bonds; $15,000,000 of $100 par value 5 per cent preferred stock and 850,000 shares of no par common stock set up at $100 per share.

Provision is made in the plan for the payment of $12,841,600 of various receivers' certificates, which are outstanding in addition to the $11,870,000 to be assumed, at the rate of $300 in cash (or a total cash outlay of $3,852,480) and $700 in new first mortgage 4 per cent bonds (or a total of $8,989,120 in bonds).

In place of $49,467,526 in Seaboard underlying divisional bonds, there would be issued $6,958,901 in first mortgage bonds, $16,637,936 in income mortgage bonds, $4,047,690 in preferred stock and $21,338,968 in common stock.

For a total of $192,918,312 in Seaboard general mortgage bonds, there would be issued $12,223,856 in first mortgage bonds, $27,520,626 in income mortgage bonds, $8,598,903 in preferred stock and $50,098,107 in common stock. Of $37,194,943 in Seaboard collateral trust obligations, there would be issued $3,134,281 in first mortgage bonds, $6,636,186 in income mortgage bonds, $1,854,462 in preferred stock and $10,732,077 in common stock.

Of a total debt of subsidiary railroad and terminal companies of $25,215,806 held by Seaboard, $493,205 would be paid in cash and there would be issued $1,165,289 in first mortgage bonds of the new company, $1,672,572 in income mortgage bonds, $489,579 of preferred stock and $2,777,889 of common stock.

Other securities and claims for which no provision is made in the plan include $61,179,262 (book value) of common stock; $37,300 of 6 per cent preferred stock; $23,894,100 of 4-2 per cent preferred stock; $1,191,579 of general unsecured claims not entitled to priority or payment ahead of mortgage liens (as of January 1, 1943); $1,600,000 of Georgia, Florida & Alabama first preferred 5 per cent stock (including unpaid accumulated dividends as of January 1, 1943 of $600,000); and $795,000 second preferred 4-5 per cent stock of the same road (including unpaid accumulated dividends as of January 1, 1943 of $295,000).

TEXAS & PACIFIC.—*Extension of Loan.* —This company has applied to the Interstate Commerce Commission for an extension of the time within which it may pledge and repledge $10,000,000 general and refunding mortgage 5 per cent bonds, Series D, as collateral for short term loans from June 30, 1943, to June 30, 1945.

WACO, BEAUMONT, TRINITY & SABINE. —*Authority for Extension Canceled.*—The Interstate Commerce Commission has issued a supplemental report and order which cancels without prejudice its certificate, originally issued July 12, 1927, authorizing this road to construct lines from Lovingston, Tex., to Port Arthur, about 100 miles, and from Weldon, Tex., to Waco, about 109 miles. Pointing out that there have been changes in conditions since that certificate was issued, and since various extensions in time for its performance have been granted, the commission suggests that its present action does not foreclose the filing of a new application proposing construction. "Of course," the report continues, in connection therewith the applicants should be prepared to show that such construction can be financed."

Average Prices Stocks and Bonds

	June 22	Last week	Last year
Average price of 20 representative railway stocks..	36.35	36.79	24.39
Average price of 20 representative railway bonds ..	77.90	77.47	63.18

Dividends Declared

East Pennsylvania.—$1.50, semi-annually, payable July 20 to holders of record July 1.

Norfolk & Western.—$2.50, quarterly, payable September 10 to holders of record August 21; 4 Per Cent Adj. Preferred, $1.00, quarterly, payable August 10 to holders of record July 22.

Philadelphia & Trenton.—$2.50, quarterly, payable July 10 to holders of record July 1.

Pittsfield & North Adams.—$2.50, semi-annually, payable July 10 to holders of record July 1.

Providence & Worcester.—$2.50, payable July 1 to holders of record June 9.

Reading.—25¢, quarterly, payable August 12 to holders of record July 15.

Richmond Fredericksburg & Potomac.—Common; Common non-voting; Dividend obligations, each $3.00, payable June 30 to holders of record June 22.

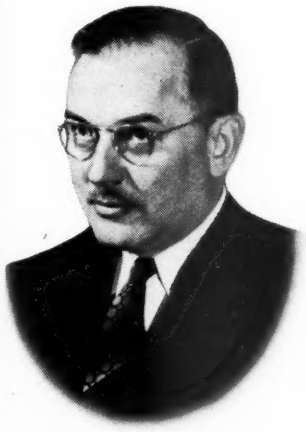
Savannah & Atlanta.—5 Per Cent Preferred, $1.25, quarterly, payable July 1 to holders of record June 9.

Ware River.—Guaranteed, $3.50, semi-annually, payable July 7 to holders of record June 30.

Railway Officers

EXECUTIVE

Samuel A. Boyer, manager, public relations, of the New York, New Haven & Hartford, has been appointed also assistant to president, with headquarters at Grand Central terminal, New York. He will also maintain headquarters at South station, Boston, Mass. Mr. Boyer was graduated from Kansas University in 1923, and from Harvard University Graduate School of Business Administration in 1925, and soon after entered the banking business at Cleveland, Ohio. In 1930 he joined the Baldwin Locomotive Works at Philadelphia, Pa., and it was while he was employed there that he first became identified with publicity and advertising. Mr. Boyer joined the New York, New Haven & Hartford as publicity manager in February, 1935, and in September of the same year, he became



Samuel A. Boyer

advertising manager. Mr. Boyer was appointed manager, public relations, of the New Haven, in March, 1942.

FINANCIAL, LEGAL AND ACCOUNTING

R. E. Plummer, whose appointment as controller of the Southern Pacific, with headquarters at New York was announced in the *Railway Age* of June 19, was born on March 25, 1895, at New York, and is a graduate of New York University, School of Commerce, Accounts and Finance. Mr. Plummer entered railroad service in September, 1919, as a clerk in the accounting department of the El Paso & Southwestern (now part of Southern Pacific). In October, 1924, upon the acquisition of the El Paso & Southwestern by the Southern Pacific, he became special accountant of the Southern Pacific, and in September, 1936, he was appointed assistant to controller. Mr. Plummer became assistant to vice-president in charge of finances in June, 1942, and remained in that position until his recent appointment as controller.

George H. Penland, whose promotion to general attorney of the Missouri- Kansas-Texas, with headquarters at Dallas, Tex., was reported in the *Railway Age* of June 12, was born at Hayesville, N. C., in 1888, and attended Grayson College, Whitewright, Tex., and Baylor Univer-

George H. Penland

sity. He entered railway service in October, 1917, as a district attorney of the Katy at Waco, Tex., and in 1929 he was advanced to assistant general solicitor at Dallas, which position he held until his recent promotion.

OPERATING

Willis C. Pruett, superintendent of the North-Western district of the Missouri-Kansas-Texas, with headquarters at Wichita Falls, Tex., has been granted a leave of absense for military service and has been commissioned a Lieutenant-Colonel, with probable assignment to the military railway service.

L. A. Collins, assistant superintendent of the Idaho division of the Union Pacific at Nampa, Idaho, has been promoted to superintendent of the Oregon division, with headquarters at Portland, Ore., succeeding **G. H. Warfel. E. L. Chantry,** trainmaster at Pocatello, has been advanced to assistant superintendent of the Idaho division, replacing Mr. Collins.

John E. Hickey, service director in the office of vice-president of operation of the Delaware, Lackawanna & Western at New York, has been appointed trainmaster of the Morris and Essex division, with headquarters at Hoboken, N. J. **Raymond B. Connell,** supervisor of passenger service at Hoboken, has been appointed service director at New York, succeeding Mr. Hickey.

Harold W. Quinlan, superintendent of dining cars of the New York, New Haven & Hartford, has been appointed manager, dining service, with headquarters as before at Boston, Mass., and **Laurence R. Swain** has been appointed special assistant to manager, dining service, with headquarters at Boston. **Thomas F. Watson** has been appointed superintendent of dining cars at Boston, and **Albert F. Rockefeller** has been appointed assistant superintendent of dining cars, with headquarters at New York. **Lester A. Wilson** has been appointed grill car superintendent and **Herbert M. Sims** restaurant superintendent at Boston.

Oscar N. Harstad, general manager of the Eastern lines of the Chicago, Milwaukee, St. Paul & Pacific, who has returned to the Milwaukee after serving for six months as associate director of the Division of Railway Transport of the Office of Defense Transportation, has also been appointed assistant chief operating officer of the system, with headquarters as before at Chicago.

W. R. Minton, trainmaster of the Great Northern at Willmar, Minn., has been promoted to division superintendent of the Klamath division, with headquarters at Klamath Falls, Ore., succeeding **H. M. Shapleigh,** who has been transferred to the Butte division, with headquarters at Great Falls, Mont. **I. E. Manion,** superintendent of the Butte division, has been transferred to the Spokane division, with headquarters at Spokane, Wash., succeeding **John L. Close** who has retired after 35 years of service.

Charles T. Rowley, whose promotion to superintendent of the Western division of the Chicago, Rock Island & Pacific, with headquarters at Fairbury, Neb., was reported in the *Railway Age* of June 12, was born at Clyde, Kan., on July 30, 1894, and entered railway service on February 10, 1910, as a station helper of the Rock Island at Clyde. He later served successively as a telegrapher, agent and dispatcher at vaarious points and in February, 1936, he was promoted to chief rules examiner, system, with headquarters at Kansas City, Mo. Mr. Rowley was appointed trainmaster at Des Moines, Iowa, in August, 1937, and was transferred to Pratt, Kan., in December, 1939, and to Little Rock, Ark., in December 1941. A year later, he was promoted to assistant superintendent at Trenton, Mo., where he remained until his recent promotion, effective June 2.

William B. Simmons, whose promotion to superintendent of the St. Louis terminals of the Chicago, Burlington & Quincy, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of May 22, was born at Hiawatha, Kan., on January 21, 1895, and entered railway service in August, 1913, as a yard clerk of the Burlington at Kansas City, Mo. He was later promoted to night chief yard clerk and in July, 1917, he was furloughed for military service, returning to the Burlington at Kansas City in May, 1919, as chief yard clerk. In February, 1926, he was advanced to assistant yardmaster and in January, 1931, he was appointed general yardmaster at St. Joseph, Mo. Mr. Simmons was transferred to St. Louis in February, 1935, and in April, 1937, he was promoted to terminal trainmaster at Rock Island, Ill. Eight months later, he was transferred to Lincoln, Neb., and in October, 1939, he was appointed

News Department continued on second left-hand page

Major Economies

General Motors 600 Hp.
Diesel Switcher

General Motors 6000 Hp.
Diesel Road Locomotive

General Motors 5400 Hp.
Diesel Freight Locomotive

SEABOARD RAILWAY
THROUGH THE HEART OF THE SOUTH

GENERAL MOTORS
LOCOMOTIVES

follow

GM DIESEL EXPANSION

General Motors Diesel Locomotives have definitely established their superiority in switching, transfer, freight and passenger service, providing — reduction in train miles as much as 50 percent — greater tonnage-hauling capacity — higher availability — faster schedules — lower operating costs — increased revenues.

Railroads can now realize ***further major economies*** which logically follow the complete Dieselization of an entire railroad or section of a railroad, such as — fewer locomotives required — fewer terminals required — elimination of costly water-treating plants — water towers — track pans — coaling plants — cinder pits — replacement of large and costly engine-house and backshop facilities with small, modern, efficient but inexpensive maintenance plants.

The ever-increasing displacement of steam power with GM Diesels in all classes of service is a natural process of evolution — **PROGRESS.**

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS CORPORATION
LA GRANGE, ILLINOIS, U.S.A.

trainmaster of the Aurora division, with headquarters at Aurora, Ill. Mr. Simmons was promoted to assistant superintendent of the La Crosse division, with headquarters at St. Paul, Minn., in October, 1941, which position he held until his recent promotion, effective May 16.

P. M. Roeper, whose appointment as superintendent of the Wilkes-Barre division of the Pennsylvania with headquarters at Sunbury, Pa., was announced in the *Railway Age* of June 19, is a native of McKeesport, Pa., and attended the University of Southern California and Carnegie Institute of Technology. Mr. Roeper entered the service of the Pennsylvania in 1928 as an assistant on the engineer corps at Middletown, Pa., subsequently holding various positions at Sunbury, Pa., Chester, Newport, Hollidaysburg and New Castle. Mr. Roeper was appointed division engineer, Panhandle division, at Pittsburgh, Pa., in January, 1942, and remained in that position until his recent appointment as superintendent at Sunbury.

P. M. Roeper

TRAFFIC

B. D. Casey has been appointed general agent of the Gulf, Mobile & Ohio, with headquarters at Laurel, Miss.

H. Arkle has been appointed division freight agent of the Canadian Pacific at Winnipeg, Man., succeeding **J. Halstead** who has retired.

Benjamin Mendez has been appointed traffic manager of the National Railways of Mexico, with headquarters at Mexico City, Mex.

R. A. Stanley has been appointed division freight agent of the Louisville & Nashville, with headquarters at New Orleans, La.

Charles A. Johnson, chief clerk to the vice-president-traffic of the Texas & Pacific at Dallas, Tex., has been promoted to assistant general freight agent, with the same headquarters, a newly created position.

George F. Mills, chief clerk to the vice-president, traffic, of the Erie, has been promoted to division freight agent, with headquarters at Rochester, N. Y. **John W. Cloud,** commercial agent at St. Louis, Mo., has been advanced to general agent, with headquarters at Peoria, Ill.

M. M. Wolverton, division freight and passenger agent of the Chicago, Milwaukee, St. Paul & Pacific at Aberdeen, S. D., has been promoted to general agent at Omaha, Neb., succeeding **J. E. Finnegan,** who has retired, and **G. E. Benz,** traveling freight agent at Minneapolis, Minn., has been advanced to division freight and passenger agent at Aberdeen, replacing Mr. Wolverton.

Fred A. Parker. chief clerk to the passenger traffic manager of the Southern Pacific Lines in Texas and Louisiana at Houston, Tex., has been promoted to the newly created position of assistant to the passenger traffic manager, with the same headquarters. Mr. Parker entered railway service in 1910 in the local freight office of the Southern Pacific Lines in Texas and Louisiana at San Antonio, Tex., and on September 13, 1910, he entered the passenger traffic department. On April 1, 1928, he was appointed chief clerk to the passenger traffic manager at Houston, the position he held until his recent promotion, effective June 12.

J. T. Bate, assistant traffic manager of the Missouri-Kansas-Texas with headquarters at Los Angeles, Cal., has been relieved of the supervision of the Pacific Coast agencies of this road, at his own request, and has been appointed special traffic representative at Los Angeles with certain assigned duties. The position of assistant traffic manager has been abolished. Mr. Bate was born at Hudson, Mich., on July 18, 1869, and entered railway service with the Katy on January 1, 1889, as a yard clerk at Parsons, Kan. After serving in various clerical capacities at Parsons, Mr. Bate was transferred to McAlester, Okla., as a rate and bill clerk on December 1, 1894, then becoming agent at the same point. On December 1, 1897, he returned to Parsons as traveling freight and passenger agent and on November 1, 1899, he was appointed commercial agent at San Antonio, Tex., being transferred to Denison, Tex., on January 1, 1904, and thence to Los Angeles on January 1, 1906. He was advanced to the position of Pacific Coast representative with headquarters at San Francisco, on January 1, 1918, and was subsequently transferred to Los Angeles in the same capacity. In March, 1937, he was advanced to assistant traffic manager at Los Angeles in charge of the Los Angeles, San Francisco and Seattle agencies.

Hobart H. Young, whose appointment as general freight agent of the Pennsylvania, with headquarters at Pittsburgh, Pa., was announced in the *Railway Age* of June 19, was born on June 11, 1900, at Denver, Colo. Mr. Young joined the Signal Corps, United States Army, in April, 1917, and had 10 months' service overseas. He entered the employ of the Pennsylvania on May 12, 1920, as a clerk at Jersey City, N. J. After serving in the station and traffic departments in the metropolitan New York district, he was appointed freight representative at New York in January, 1923, becoming assistant chief clerk to the division freight agent at that point in May of the same year.

Hobart H. Young

On January 16, 1926, he was appointed chief clerk to the division freight agent at Altoona, Pa., and on April 16, 1929, he became district freight agent at Philadelphia. On January 1, 1930, he was sent to New England and in June of the same year he was appointed New England freight agent, with headquarters at Boston, Mass. Mr. Young was promoted to assistant general freight agent at Philadelphia on October 16, 1936, and remained in that capacity until his recent promotion.

Carter Howard Lippincott, whose appointment as coal traffic manager of the Pennsylvania, with headquarters at Philadelphia, Pa., was announced in the *Railway Age* of June 19, was born on June 17, 1892, at Chicago. Mr. Lippincott entered the service of the Pennsylvania on August 8, 1910, as a clerk in the office of the freight agent at Philadelphia. On March 14, 1912, he was transferred to the general office and served under the general freight agent until May 8, 1916, when he was transferred to the office of coal traffic manager at Philadelphia. Mr. Lippincott entered military service on February 7, 1918, and served in the army until May 21, 1919. His military experience included service in France with the 54th Coast Artillery. Upon his return to the United States, Mr. Lippincott resumed his railroad duties in the office of the general coal freight agent at Philadelphia, and on January 16, 1920, he was appointed assistant chief rate clerk in that office. On March 1, 1920, he was appointed chief rate clerk in the Office of the general coal freight agent at Pittsburgh, Pa., and in August, 1925, he was appointed chief clerk to the coal and ore agent at Cleveland, Ohio, remaining in that position until November 1, 1925, when he was appointed coal freight agent at Pitts-

burgh, being transferred to Philadelphia on January 1, 1926. On May 1, 1931, he was appointed coal traffic manager at Philadelphia, becoming general coal freight agent at that point on June 1, 1932. Mr. Lippincott became assistant coal traffic manager on December 16, 1939, the position he held at the time of his recent promotion to coal traffic manager.

Homes Bannard, whose appointment as general passenger agent of the Pennsylvania with headquarters at Washington, D. C., was announced in the *Railway Age* of June 19, was born on December 31, 1905, at Asbury Park, N. J., and attended Phillips Exeter Academy, and was graduated from Princeton University in 1929, receiving a B. A. degree. Mr. Bannard entered the service of the Pennsylvania on September 1, 1929, as a clerk in the general passenger offices at New York, subsequently serving in various departments in the general office, and later as ticket seller at New York. On April 16, 1931, he was appointed a passenger representative at Boston, Mass., being transferred to

Homes Bannard

New Haven the following July, and to the division passenger office at Philadelphia on March 1, 1935, serving in the latter capacity until the following December, when he was promoted to district passenger agent on the staff of the passenger traffic manager. In this capacity his time was divided between special assignments and general office work. On April 16, 1937, Mr. Bannard was appointed New England passenger agent at Boston, and on September 16, 1938, he became division passenger agent at Indianapolis, Ind. He was promoted to assistant general passenger agent of the Long Island on June 16, 1939. On May 16, 1940, Mr. Bannard was appointed assistant general passenger agent of the Pennsylvania at Philadelphia, and on May 16, 1941, he was transferred to New York and remained in the latter position until his recent appointment.

Frank Mulford Ware, whose appointment as general passenger agent, Eastern region, of the Pennsylvania, with headquarters at Philadelphia, Pa., was announced in the *Railway Age* of June 19, was born on January 8, 1896, at Bridgeton, N. J. Mr. Ware's first position was that of secretary to the treasurer of the Pennsylvania Steel Company during 1914 and 1915. When that concern was absorbed by the Bethlehem Steel Company,

Frank Mulford Ware

he became associated with the Midvale Steel and Ordnance Company as secretary to the auditor. Subsequently he was office manager of the Burroughs Adding Machine Company at New York, and later assistant sales manager of the Remington Cash Register Company at Pittsburgh, Pa. During World War I he served as petty officer first class in the United States Naval Reserve Corps. Mr. Ware entered the service of the Pennsylvania on December 26, 1922, as a clerk in the office of the division passenger agent at Pittsburgh, subsequently becoming secretary to the general passenger agent at that point. Shortly thereafter, he was appointed passenger representative at Pittsburgh, and on September 1, 1927, he was transferred to Cleveland, Ohio. On July 1, 1929, Mr. Ware was appointed assistant general passenger agent at Cincinnati, Ohio, becoming division passenger agent at that point on June 1, 1932. On April 16, 1937, he was promoted to assistant general passenger agent at St. Louis, Mo., being transferred to Philadelphia on May 16, 1941, and remaining in the latter position until his recent appointment as general passenger agent at Philadelphia.

W. J. Kenealy has been appointed assistant passenger traffic manager of the Seaboard Air Line, with headquarters at Jacksonville, Fla., and **J. D. Makinson** has been appointed general passenger agent at Norfolk, Va. The position of general passenger agent at Jacksonville, formerly held by Mr. Kenealy, and that of assistant general passenger agent at Norfolk, formerly held by Mr. Makinson, have both been abolished. **K. E. Lynch** has been appointed assistant to general passenger agent at Norfolk. **W. J. Ficht,** assistant general passenger agent at Norfolk, and **J. R. Getty** have been appointed general passenger agents, with headquarters at Tampa, Fla., and Miami, respectively. **A. C. Rea** has been appointed to succeed Mr. Ficht as assistant general passenger agent at Norfolk, and **C. W. Vaughan** has been appointed general baggage agent at Norfolk. **J. F. Thomas, Jr.,** has been appointed district passenger agent at Sarasota, Fla., succeeding **H. E. Hitchings** who has been transferred to Miami.

ENGINEERING & SIGNALING

Harry A. Hampton, division engineer of the Portland division of the Southern Pacific, with headquarters at Portland, Ore., has retired after 35 years service.

C. E. Jacobson has been appointed bridge engineer of the Atlanta & West Point, the Western Railway of Alabama and the Georgia Railroad, with headquarters at Atlanta, Ga.

Joseph A. Noble, whose promotion to district engineer, Southern district, of the Western lines of the Atchison, Topeka & Santa Fe, with headquarters at Amarillo, Tex., was reported in the *Railway Age* of June 19, was born at Bonham, Tex., on November 12, 1888, and received his education at the University of Texas. He entered railway service in 1907 as a rodman of the Santa Fe at Center, Tex. Later he served as levelman, transitman, location engineer and assistant bridge inspector at various points in Texas, Oklahoma, New Mexico and Kansas until April, 1914, when he was appointed a draftsman, with headquarters at Amarillo. In 1915 Mr. Noble was appointed chief clerk to the chief engineer, with the same headquarters and in 1917 he obtained a leave of absence to serve as a captain in the Engineer Corps of the U. S. Army. In September, 1919, Mr. Noble returned to the Santa Fe as division engineer at LaJunta, Colo., being transferred to the Pecos division, with headquarters at Clovis, N. M., in 1930. He remained in that location until his new appointment, effective June 8.

Joseph A. Noble

John H. Kelly, engineer of track of the New York Central, Buffalo and East, has been promoted to engineer maintenance of way of the Lines Buffalo and East, including the Boston & Albany, with headquarters as before at New York, to suc-

News Department continued on next left-hand page

ceed **G. N. Edmondson,** who has been granted a leave of absence because of ill health. **J. N. Grim,** division engineer of the Electric division, with headquarters at New York, has been promoted to engineer of track to succeed Mr. Kelly. **F. G. Smith,** division engineer of the Buffalo division, with headquarters at Buffalo, N. Y., has been transferred to the Electric division at New York, to succeed Mr. Grim, and **F. B. Wilcox,** division engineer of the St. Lawrence, Adirondack and Ottawa divisions, with headquarters at Watertown, N. Y., has been transferred to Buffalo to replace Mr. Smith. **C. T. Gunsallus,** supervisor of track with headquarters at Beacon, N Y., has been promoted to division engineer, with headquarters at Watertown, to replace Mr. Wilcox.

J. C. DeJarnette, Jr., supervisor of track of District No. 2 of the Richmond, Fredericksburg & Potomac at Fredericksburg, Va., has been promoted to division engineer, a newly created position, with headquarters at Richmond, Va.

PURCHASES AND STORES

Joseph V. Miller, whose promotion to manager of stores of the Chicago, Milwaukee, St. Paul & Pacific with headquarters at Milwaukee, Wis., was reported in the *Railway Age* of June 19, entered railway service in 1906 as a signal

Joseph V. Miller

boy of the Duluth, Missabe & Iron Range, subsequently serving as call boy, machinists' helper and store clerk. In 1912 Mr. Miller was appointed secretary to the general storekeeper of the Chicago, Milwaukee & Puget Sound (now a part of the Milwaukee) with headquarters at Tacoma, Wash. In 1918 he was advanced to district storekeeper of the Milwaukee at Deer Lodge, Mont., and in the same year he resigned to become western sales manager of the Prime Manufacturing Company. In 1924 Mr. Miller returned to the Milwaukee as assistant general storekeeper with headquarters at Milwaukee, holding that position until his new appointment, effective June 1.

E. A. Marples, commissary agent of the Western region of the Canadian National at Edmonton, Alta., has been promoted to purchasing gaent, with the same headquarters, a newly-created position.

SPECIAL

John T. Williamson, whose promotion to director of personnel of the Chicago, Burlington & Quincy, with head-

John T. Williamson

quarters at Chicago, was reported in the *Railway Age* of June 19, was born at Minneapolis, Minn., on February 6, 1884, and entered railway service on July 1, 1900, as a messenger of the Burlington, later serving as ticket seller, tourist agent, station passenger agent and traveling passenger agent, with headquarters at St. Louis, Mo. In 1919 he was appointed freight service inspector at Alliance, Neb., and one year later he was advanced to night trainmaster at Casper, Wyo. From 1920 to 1924 Mr. Williamson served as chief clerk of the relief department at Chicago, being advanced to superintendent of that department in the latter year. In 1933 he was given the additional duties of superintendent of the employment department and chairman of the board of pensions, with the same headquarters. From July 28, 1934, to May 23, 1935, he served as carrier member of the Railroad Retirement Board at Washington, D. C., returning to the Burlington on the latter date to resume the three positions he held at the time of his new appointment, effective June 1.

OBITUARY

Samuel F. B. Morse, who retired in 1904 as passenger traffic manager of the Southern Pacific Lines in Texas and Louisiana with headquarters at Houston, Tex., died recently at New York.

Allen S. H. Bristow, who retired as general attorney of the Atchison, Topeka & Santa Fe at New York on January 1, 1942, died on June 21 at Glen Head, N. Y., at the age of 74.

John Gerdes Lonsdale, co-trustee of the St. Louis-San Francisco, with headquarters at St. Louis, Mo., died on June 16 at a hospital in Hot Springs, Ark., following a heart attack suffered two days previously. Mr. Lonsdale, widely known in banking circles, has taken an active interest in the financial aspects of transportation matters for many years He was born at Memphis, Tenn., on April 4, 1872, and attended Christian Brothers College, St. Louis, St. John's Military Academy, Manlius, N. Y., a business college in Baltimore, Md., and the University of Arkansas. Mr. Lonsdale entered the real estate business at Hot Springs in 1891. Later he entered the stock brokerage business in his own name at New York and Hot Springs, and subsequently became a member of Logan & Bryan, stock brokers at New York. He resigned from the latter position in 1915 to become president of the National Bank of Commerce of St. Louis, which position he held until May 20, 1929, when this bank merged with the Mercantile Trust Company, forming the Mercantile-Commerce Bank & Trust Company, of which he became president. On January 9, 1933, he became chairman of the board of this institution, resigning on January 1, 1937. Mr. Lonsdale was appointed co-receiver of the Frisco in November, 1932, subsequently being appointed co-trustee by the Federal court. Long active in the affairs of the Chamber of Commerce of the United States he served that organization as a

John G. Lonsdale

vice-president and as chairman of committees on aeronautics, flood control and national trade relations. He was a former president of the Bankers' Club of St. Louis and at one time was president of the National Bank division and chairman of the Rail Consolidation committee of the American Bankers Association.

Frederick W. Buckpitt, operating assistant to the general manager of the Boston & Maine, Maine Central and the Portland Terminal Company, with headquarters at Boston, Mass., died on June 20, at Boston, at the age of 58.

Frank S. Mitten, superintendent of the combined Wyoming and the Mahanoy and Hazleton divisions of the Lehigh Valley with headquarters at Wilkes-Barre, Pa., died on June 23, at a hospital in Sayre, Pa., at the age of 65.

FOR . . .

More Flexible Control of SWITCHERS

Our new No. 6-DS Brake Equipment has all the basic operating functions of the well-known No. 14-EL, with improved characteristics that help to increase the mobility of switchers ★ The independent brake valve is of the self-lapping, instead of the manually-lapped rotary type, which assures maximum flexibility of control. Pedestal mounting of brake valve makes for convenient access, improves cab appearance, and simplifies piping ★ An adequate and reliable supply of air for the necessarily frequent brake operations is provided by the 3-CD Compressor, developed especially for Diesel switchers ★ The same trustworthy performance in rigorous and sustained duty that characterized its predecessor, is assured with this new equipment. » » » »

Locomotives to which the No. 6-DS Brake Equipment has been applied, have also included pneumatic control of the engine throttle to provide simpler and smoother speed adjustment.

Operating Revenues and Operating Expenses of Class I Steam Railways

FOR THE MONTH OF APRIL, 1943 AND 1942

Item	United States		Eastern District		Southern District		Western District	
	1943	1942	1943	1942	1943	1942	1943	1942
Miles of road operated at close of month	229,403	231,499	56,470	56,896	43,435	43,885	129,498	130,718
Revenues:								
Freight	$570,135,788	$468,005,545	$229,634,205	$201,128,435	$111,275,054	$94,070,681	$229,226,529	$172,806,429
Passenger	127,915,116	66,116,482	50,220,298	32,276,785	27,316,829	12,843,321	50,377,989	20,996,376
Mail	10,213,940	8,984,044	3,651,882	3,325,440	1,807,260	1,608,768	4,754,796	4,049,836
Express	12,219,700	8,369,828	4,391,119	2,691,605	2,052,151	1,546,490	5,776,430	4,131,733
All other operating revenues	28,313,437	21,054,516	12,451,217	10,210,021	4,041,491	2,729,947	11,820,729	8,114,548
Railway operating revenues	748,797,981	572,530,415	300,348,721	249,632,286	146,492,785	112,799,207	301,956,475	210,098,922
Expenses:								
Maintenance of way and structures	83,495,011	62,369,156	31,371,582	24,889,512	14,980,486	10,633,422	37,142,943	26,846,222
Maintenance of equipment	113,609,451	99,099,595	49,137,277	44,635,652	21,292,726	18,987,325	43,179,448	35,476,618
Traffic	10,246,334	9,781,429	3,713,120	3,535,293	1,966,802	1,894,053	4,566,412	4,352,083
Transportation—Rail line	211,874,175	177,232,502	96,801,833	82,289,953	36,197,538	30,338,820	78,874,804	64,603,729
Transportation—Water line	383	15,161	.....	.....	.....	.....	383	15,161
Miscellaneous operations	8,239,420	5,383,022	2,956,830	2,166,136	1,414,002	902,507	3,868,588	2,314,379
General	14,683,863	12,874,875	5,988,929	5,129,559	2,879,196	2,489,855	5,815,738	5,255,461
Railway operating expenses	442,148,637	366,755,740	189,969,571	162,646,105	78,730,750	65,245,982	173,448,316	138,863,653
Net revenue from railway operations	306,649,344	205,774,675	110,379,150	86,986,181	67,762,035	47,553,225	128,508,159	71,235,269
Railway tax accruals	163,303,025	89,029,636	55,406,073	37,527,478	41,630,061	24,507,991	66,266,891	26,994,167
Railway operating income	143,346,319	116,745,039	54,973,077	49,458,703	26,131,974	23,045,234	62,241,266	44,241,102
Equipment rents—Dr. balance	12,950,267	12,152,919	5,721,110	6,260,601	1,087,753	1,045,103	6,141,404	4,847,215
Joint facility rent—Dr. balance	3,336,690	2,995,826	1,676,429	1,627,810	376,658	349,249	1,283,603	1,018,767
Net railway operating income	127,059,362	101,596,294	47,575,538	41,570,292	24,667,563	21,650,882	54,816,261	38,375,120
Ratio of expenses to revenues (per cent)	59.0	64.1	63.2	65.2	53.7	57.6	57.4	66.1
Depreciation included in operating expenses	26,627,525	20,744,317	11,371,583	9,675,503	5,101,544	3,979,163	10,154,398	7,089,651
Deferred maintenance — Way and structures	d 113,940	.....	d 65,405	.....	.....	.....	d 48,535	.....
Amortization of Defense projects	10,318,631	6,293,231	3,815,702	1,943,485	2,437,997	1,693,693	4,064,932	2,656,053
Deferred maintenance—Equipment—	d 49,963	.....	.....	.....	d 5,012	.....	d 44,951	.....
Major repairs—Equipment	150,000	.....	.....	.....	.....	.....	150,000	.....
Pay-roll taxes	16,236,634	13,717,515	6,925,513	6,058,666	2,864,273	2,425,509	6,446,848	5,233,340
Federal income taxes*	122,502,770	53,234,398	37,633,390	21,944,280	33,956,486	17,562,034	50,912,894	13,728,084
All other taxes	24,563,621	22,077,723	10,847,170	9,524,532	4,809,302	4,520,448	8,907,149	8,032,743

FOR FOUR MONTHS ENDED WITH APRIL, 1943 AND 1942

Item								
Miles of road operated at close of month	229,547	231,572	56,509	56,917	43,466	43,897	129,572	130,758
Revenues:								
Freight	$2,182,940,678	$1,683,838,262	$864,750,641	$710,881,823	$439,235,640	$334,703,937	$878,954,397	$638,252,502
Passenger	468,312,203	235,665,538	185,422,763	114,567,467	101,179,763	45,657,438	181,709,677	75,440,633
Mail	39,049,192	35,079,784	13,740,979	12,789,949	6,998,061	6,234,821	18,310,152	16,055,014
Express	41,727,579	25,813,002	15,409,073	8,864,114	7,187,202	4,704,292	19,131,304	12,244,596
All other operating revenues	107,932,617	75,611,226	47,256,889	36,588,238	15,068,488	10,181,305	45,607,240	28,841,683
Railway operating revenues	2,839,962,269	2,056,007,812	1,126,580,345	883,691,591	569,669,154	401,481,793	1,143,712,770	770,834,428
Expenses:								
Maintenance of way and structures	308,995,643	214,244,505	120,143,578	86,606,350	57,274,626	40,883,379	131,577,439	86,754,776
Maintenance of equipment	441,579,143	381,559,844	191,802,531	174,823,886	83,006,955	71,951,145	166,769,657	134,784,813
Traffic	40,540,912	38,642,455	14,763,497	13,933,525	7,817,629	7,791,949	17,959,786	16,916,981
Transportation—Rail line	842,672,826	697,379,668	384,843,414	322,276,088	144,361,791	118,601,856	313,467,621	256,501,724
Transportation—Water line	4,292	62,516	.....	.....	.....	.....	4,292	62,516
Miscellaneous operations	32,528,838	20,305,980	11,786,657	8,354,784	5,451,630	3,455,147	15,290,551	8,496,049
General	57,930,513	51,147,570	23,864,794	20,552,013	11,231,768	9,835,396	22,833,951	20,760,161
Railway operating expenses	1,724,252,167	1,403,342,538	747,204,471	626,546,646	309,144,399	252,518,872	667,903,297	524,277,020
Net revenue from railway operations	1,115,710,102	652,665,274	379,375,874	257,144,945	260,524,755	148,962,921	475,809,473	246,557,408
Railway tax accruals	585,525,209	277,602,797	193,586,838	116,138,742	154,052,389	69,689,231	237,885,982	91,774,824
Railway operating income	530,184,893	375,062,477	185,789,036	141,006,203	106,472,366	79,273,690	237,923,491	154,782,584
Equipment rents—Dr. balance	48,607,092	39,788,487	20,085,366	19,938,296	4,038,297	1,941,270	24,483,429	17,908,921
Joint facility rent—Dr. balance	13,458,673	11,995,713	6,841,788	6,403,157	1,597,200	1,299,577	5,019,685	4,292,979
Net railway operating income	468,119,128	323,278,277	158,861,882	114,664,750	100,836,869	76,032,843	208,420,377	132,580,684
Ratio of expenses to revenues (per cent)	60.7	68.3	66.3	70.9	54.3	62.9	58.4	68.0
Depreciation included in operating expenses	106,127,362	77,029,653	45,117,326	34,686,698	20,232,844	16,018,706	40,777,192	26,324,249
Deferred maintenance — Way and structures	d 202,229	.....	d 99,497	.....	.....	.....	d 102,732	.....
Amortization of Defense projects	40,665,619	19,663,447	15,396,697	6,774,644	10,058,110	4,796,374	15,210,812	8,092,429
Deferred maintenance—Equipment	d 167,850	.....	.....	.....	d 19,251	.....	d 148,599	.....
Major repairs—Equipment	550,000	.....	.....	.....	.....	.....	550,000	.....
Pay-roll taxes	63,690,157	53,023,897	27,403,896	23,476,212	11,237,502	9,397,330	25,048,759	20,150,355
Federal income taxes*	426,348,751	141,120,891	125,179,415	56,344,831	123,129,996	43,248,560	178,039,340	41,527,500
All other taxes	95,486,301	83,458,009	41,003,527	36,317,699	19,684,891	17,043,341	34,797,883	30,096,969

* Includes income tax, surtax, and excess-profits tax.
d Decrease, deficit, or other reverse items.
Compiled by the Bureau of Transport Economics and Statistics Interstate Commerce Commission. Subject to revision.
(Switching and Terminal Companies Not Included.)

The Week at a Glance

PART-TIME HELP: Your reporter, some weeks ago, heard President Sloan of the M-K-T relate how high-school boys in the Paola, Kans., area were working week-ends on track maintenance, and doing a good job of it too. Herein will be found an editorial which goes further into this matter, citing a still more extensive experience—equally satisfactory—on another carrier. It is not contended that part-time work is "the solution" to the manpower shortage—but it can be a part of the solution, at least in some places and on some jobs.

●

MILWAUKEE CARS: New passenger cars are a novelty nowadays, but the Milwaukee built itself 31 of them last year—very ingenious too, not only from the progress in design embodied in them, but in the expedients which had to be contrived to surmount shortages of needed materials. These cars are described in an illustrated article herein.

●

CHEYENNE SHOPS: The Union Pacific has some new shop buildings of modern fireproof construction at Cheyenne—which our engineering editor describes elsewhere in these pages. Structures include a wheel and tank shop, a woodworking shop, and an engine-journal grease-packing house. All buildings are equipped for highly-efficient operation.

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LABOR "PRODUCTIVITY": When a railroad replaces a slower and smaller engine with a faster and larger one, how much greater is the "productivity" of the engine crew? Whose "productivity" has increased anyhow—that of the management and owners who provided the new power, or that of the engine crew who work no harder and whose hours are shortened? And what about an engine which would produce more and faster ton-miles, but is laden down with arbitrary higher wages and excess help so its comparative efficiency is destroyed? These questions lie in the realm of elementary economics, but nevertheless that is what the Diesel pay case—as reported herein—has simmered down to, viz., a union demand that economic progress in motive power henceforth be arbitrarily foreclosed.

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CAPITALIST EVANGELISTS: As all thoughtful people realize, the nation is seriously threatened with losing by politics at home the freedom it has gone to war to defend. Eric Johnston, president of the U. S. Chamber of Commerce, is writing and speaking with tireless energy, sincerity and intelligence to awaken the American people to an understanding of the principles of economic freedom which, alone, have given this nation the industrial capacity to become the "arsenal of democracy." The N. A. M. leadership is also carrying on a competent campaign to the same effect. The leading editorial herein cites these efforts as worthy of praise and support—but it notes that business leaders, members of the C. of C. and the N. A. M., are still shy of observing private enterprise principles in their treatment of transportation—which they plead so eloquently that *others practice* in their behalf. Many of the country's big business leaders are still socialists as regards transportation.

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CLASS RATES BLITZ: The I. C. C. has the statutory authority over rates, but it has much enthusiastic volunteer assistance from other quarters. This week, while the I. C. C. itself held open house for the hordes of class rate malcontents (local politicos mostly), two other governmental bureaus, with no covering statutory assignment, came along with their advice. One of these was the TVA—which, of course, being a New Deal sociological enterprise, recognizes few proprieties, and no limitations to its competence. Other gratuitous advice came from the Transportation Study Board, poor fellows, who had to intrude into this fully-occupied field in order to keep their appropriation intact (not that one or more of them didn't smile under the coercion).

●

POLITICAL RATE EXPERTS: The T. V. A. report brought an outburst of laudatory oratory from the House floor on the day following its publication. One zealous statesman suggested that the labor unions and the President's wife ought to emulate the T. V. A.—and exercise themselves in opposition to discriminations *against* the South, rather than contending against discriminations *within* the South. This worthy sectional patriot was poorly informed because, as a matter of fact, Mrs. Roosevelt has advised the nation what its policy should be on interritorial freight rates (as the account in our news pages records). Conviction regarding the right answer to this complex question appears to deepen in indirect ratio to the exponent's knowledge of the subject.

●

WORKING TOGETHER: There are two opposing methods of getting a big job done—one is to have all the brain-work done by a few supermen, who then tell the subordinate horde *what* to do—not *why*. The underlings are not supposed to do the thinking—just the obeying. This is the "planned economy" method, which so many New Dealers support for general application, and which was given a trial on the railroads in the last war. The other method is that of collaboration. The top organization doesn't pretend to do all the thinking or to exercise all the initiative—but serves rather as a clearing house for information, and a standardizer of performance. Everybody on the job has his share of initiative, responsibility and brain-work. This is how the railroads are operating today, and an editorial herein tells how the system is functioning in tackling the job of wheat movement.

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TROOP CARS: The A. A. R. has approved the proposal for building 1600 troop-carrying cars and the next move is up to Uncle Sam.

COMPETITION FORBIDDEN: One hears a good deal of abstract praise of free competition, and admonition to the railroads that they ought to engage in other forms of transportation. Actually, all manner of difficulties are imposed against putting such preachments into practice. For example, examiners for the Civil Aeronautics Board have recommended against granting an operating certificate to Seaboard Airways—which would establish competition in air transport along the Atlantic Seaboard, and would permit the S. A. L. Railway to acquire a minority interest in the new company. Thus far, it is not the public policy to encourage, or even permit, the extension of competition in air transport—or to allow other transportation agencies to participate therein.

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THEY GO TO SCHOOL: Thousands of New York Central employees and supervisors are availing themselves of educational opportunities afforded in the localities where they work—the railroad contributing the tuition money. An article herein tells what these courses of instruction embrace. One of the most popular lines (over 2,000 employees are taking it) is "job instructor training"—that is, learning how to teach newcomers their new work, instead of leaving them to the mercies of the school of experience. Other courses instruct in the art of foremanship, still others in traffic and packaging, office management, and many more.

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RATE BUREAUS OKAYED: Rate bureaus, operated by the railroads and other carriers, have been exempted from prosecution under the anti-trust laws by WPB certification to the Attorney General that these bureaus are neceesary to the prosecution of the war. They are, of course, equally necessary to the conduct of transportation — under regulation — in times of peace, and the recent activities of Thurman Arnold against them could have had no purpose except the establishment of chaos in the industry. A noteworthy characteristic of recent public policy has been its insistence upon competition in areas of "natural" (and hence regulated) monopoly, and its equal complacency toward monopoly in fields naturally competitive.

●

FLORIDA CANAL: The peninsula ditch—which informed people, excepting those with a private axe to grind, say could not be completed under a couple of years—has been turned down, 21-19, in appropriations committee. Protagonists, however, promise to continue to fight—and they have got a lot of support from people not necessarily scow-minded, by representing the canal as a fast and sure cure for the Eastern oil shortage. This promise would doubtless fail of fulfillment, but, even if the job took years to finish, the canal fans would have their waterway, a permanent transportation facility at the taxpayers' expense, and which they probably won't get unless they can pass it off as a war job.

THEY HAVE WHAT IT TAKES

The efficiency with which American railroads continue to meet the ever-increasing war demands is nothing short of "super."

Torpedoing of coastwise shipping — one of the most vital commodities being petroleum — forced upon the railroads an enormous volume of so-called *water traffic.* Added to the already record volume of freight traffic, the transportation problem of the railroads, particularly coastal, became even more serious. But *they have what it takes* to meet such challenges and General Motors Diesel Locomotives are doing their part in aiding *transportation for Victory* because

VICTORY IS OUR BUSINESS

GENERAL MOTORS LOCOMOTIVES

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION — LA GRANGE, ILLINOIS, U. S. A.

The Week at a Glance

DREAMS VS. EXPERIENCE: Two conceptions, as different as day from night, of how America should operate in the post-war years are now being given definite shape, and every citizen will have to choose his side. One camp is that for which the National Resources Planning Board is the chief spokesman. The other has, as a typical protagonist, the Committee for Economic Development. The Planning Board proposes that government agencies be given supreme authority over the post-war economy, which would rest largely on government spending (hence higher taxes, with consequent withering of tax-paying private enterprise). The proposal of the Committee of Economic Development urges, rather, that responsibility for economic activity be given to private business, with *economic experience.* The leading editorial discusses this issue, observing that government has never, anywhere, anytime, given any *evidence* that it can manage such a job as this.

●

PASSENGER TROUBLE: Persons highly-informed on passenger performance and outlook, and wholly friendly to the railroads, have voiced strong approval of an editorial we published two weeks ago, entitled "Deterioration in Passenger Service." These sources are grievously disturbed at the magnitude of congested conditions, delays and public criticism which has already developed in *some sections*—and are even more fearful when they look forward to the summer, with rising military demands and with the public's normal spending outlets narrowly limited. They foresee an overwhelming demand for passenger service, unless something is done to forestall it—and resulting unreasoning enmity for the railroads. This situation—with suggestions which have been made to meet it—are discussed editorially herein.

●

SYNDICATED CRITICISM: A writer for the Scripps-Howard papers, Peter Edson, this week commented "that trains are late, trains are crowded, mail is slow, freight and express service are worse than they have been, and if the disruption of the nation's food distribution system is in any way a transportation problem, things are in a mess." Mr. Edson quoted at length from the strictures against railroad managements—made recently by A. F. Whitney, with his customary regard for accuracy, and reported on page 729 herein. Mr. Edson did not commit himself to Mr. Whitney's views, but he left his readers free to do so. Those who have had unpleasant travel experience may find it easy to take that course. This, as our editorial suggests, is why the passenger situation now calls for lively attention.

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UNION LAWYER: Just in case you didn't happen to see the piece in the papers—Columnist George Sokolsky did some speculating in a recent article on the choice by the transportation brotherhoods of Ed Flynn as counsel to conduct their wage-increase case. Observing that the "legal competence" of President Roosevelt's friend and former chairman of the Democratic National Committee "is not in doubt," Mr. Sokolsky went on to remark, however, that he "has not, in the past, been noted either as a railroad or a labor lawyer." The columnist concluded that: "Inflation or no inflation, it would be very bad policy for Ed Flynn not to get something for the railroad brotherhoods."

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C. & S. ADJUSTMENT: The Colorado & Southern's immediate financial difficulties (early maturities and fixed charges unduly heavy in relation to recent years' earnings) have been voluntarily adjusted and approved by the court—in a proceeding briefly reported in this issue. The method employed is one which avoids the heavy expense and enormous complexity of reorganization in bankruptcy, and it makes no permanent change in the relative position of any class of security. Creditors' interests are protected—but equity-holders are not permanently foreclosed from future participation, if it develops that future earnings are more than sufficient to satisfy all just anterior claims.

●

THE STRATEGIC S. P.: No aspect of the transportation situation in this war is more significant than the degree of the nation's dependence upon the railroads and the readiness which they have shown to meet the emergency. In the decade prior to the war, politics offered maximum discouragement to the prospect of future heavy calls on railroad capacity—yet railroad managements persisted in maintaining their properties and preparing as well as pinched treasuries permitted against a future which has now become the exigent present. Just what a serious plight the country would be in, if railroad men had had no more foresight than the dominant politicians, can be readily reckoned from the article herein on the Southern Pacific's (Pacific Lines) recent transportation performance. This railroad is handling 120 per cent more passenger business and almost 80 per cent more freight than it did in 1929. It has been able to do this—not only by resourceful operating methods—but because it spent money for capital improvements, when money was hard to come by.

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ARNOLD PERSISTS: Though he has ascended the federal bench, Thurman Arnold continues his career as a partisan controversialist in transportation. In our news pages, testimony of his before a House subcommittee is reported in which he gave some startling, if true, figures on the cost of hauling perishables by air—predicting that such transportation will result in an "enormous increase in the consumer's dollar." He again expressed his opposition to "collusive rate making"—despite the fact that rate bureaus, which strike him as "collusion," are a device unanimously deemed in the public interest (as elsewhere recorded herein) by government authorities closest to transportation.

I. C. C. ON CLASS RATES: How the Commission's Division 2 is going to handle its general inquiry into class rates and classifications—on which final hearings were concluded last week—was disclosed by Commissioner Aitchison (who, with Messrs. Splawn and Alldredge comprise the Division). That is, this case will be dealt with in a "proposed report," which the Division may or may not decide to sponsor. If they do so, they will nevertheless retain "open minds" while the proceeding goes through that stage. Parties in the case have been given until June 30 to file briefs—as our account of the closing hearings records, on another page herein.

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TWO MONTHS' EARNINGS: Net railway operating income in January and February totaled 211 millions—about 62 per cent more than last year. Details are reviewed in the news pages herein, where also appears a summary of the monthly statistical statement of the I. C. C.'s Bureau of Economics & Statistics.

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EMBARGO: Eastbound freight from California—except perishables, government freight and imports—was put under a three-day embargo, beginning April 6, by the I. C. C., to permit the railroads to reduce an excessive accumulation of eastbound empties; details in the news pages herein. Another I. C. C. order forbids after April 10 the holding for reconsignment at any point south of Potomac Yard of northbound perishables.

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REVAMPING STATIONS: A compendium of practical advice on the modernization of passenger stations is embraced in the report of an A. R. E. A. sub-committee, which is the subject of an illustrated article in this issue. Railroads have in recent years had a rich experience in such undertakings—but with a vast volume of prospective work still remaining to be done. This report distills the experience up-to-date.

●

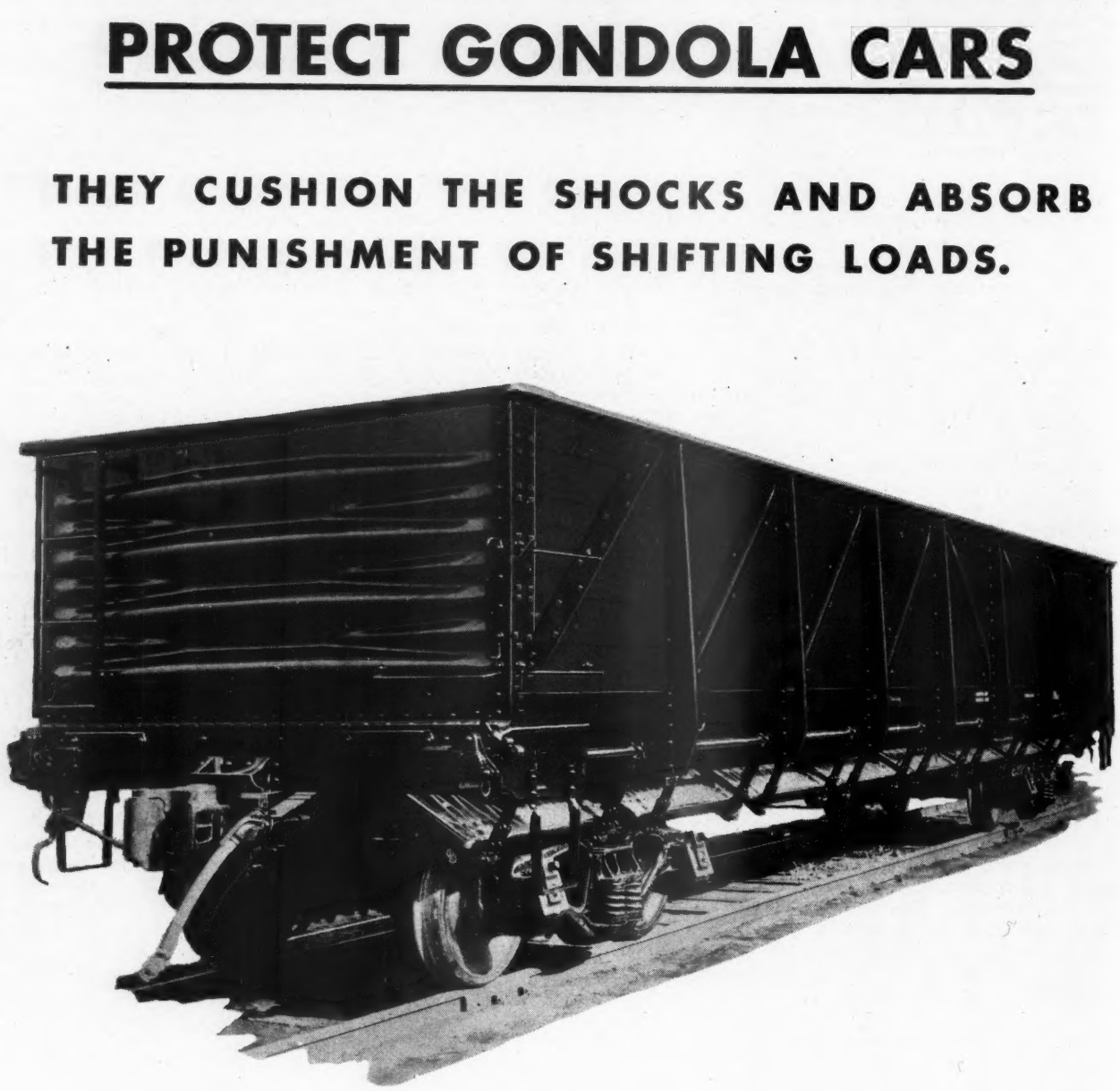
WHAT TYPE OF POWER?: It is well recognized that no one form of motive power—steam, electric, or Diesel-electric—can be called supreme for all uses. In some situations, one of the forms will show clear advantages over the other two. The selection is usually not easy though—and, to assure the wisest choice in a given case, comprehensive care is needed to provide that all contributing factors are taken into account and given their just weight. A painstaking review of these factors is given in a paper, summarized herein, by two of our editors—with suggestions as to a method of examination of a problem of motive power selection, to yield maximum assurance that the answer given will be the correct one.

●

CONDITIONS IN THE CAB: Railroad testimony herein on the enginemen's "extra deadhead" demand includes some noteworthy information on the rise in firemen's pay, relative to the work they do (e.g., the evidence of M. W. Clement).

DREADNAUGHT ENDS
PROTECT GONDOLA CARS

THEY CUSHION THE SHOCKS AND ABSORB THE PUNISHMENT OF SHIFTING LOADS.



PROVIDES UNIFORM OVERALL STRENGTH.

STANDARD RAILWAY EQUIPMENT MFG. COMPANY
HAMMOND, INDIANA

WORKS: HAMMOND, INDIANA — NEW KENSINGTON, PA.

CHICAGO OFFICE — 310 S. MICHIGAN AVE.

The Week at a Glance

WHAT RATE PRINCIPLES?: Present burdens on the railroads demonstrate that even more than the present quantity of plant is requisite to the national interest. Under private financing, there is no means of keeping railway plant intact and efficiently improved unless, over a term of years, capital is compensated at rates equal to those obtainable in alternative employment. Railroad capital was not so compensated in the dozen years prior to 1942—which is the reason why the present traffic burden has to be borne largely by plant provided by investors prior to 1930, when earnings *were* large enough to attract new capital. The I. C. C. did not provide rates yielding a compensatory return when traffic was light—contending that light patronage, rather than low rates, was then the cause of the investors' distress. Now it refuses to uphold the rate level, which traffic clamors to pay—thereby foreclosing the opportunity the occasion affords to "average up" to a return high enough to permit the carriers to compete for funds required to keep their plant intact and efficient. The illogic of the I. C. C.'s position in its rate decision is examined in the leading editorial herein.

●

HOW PROSPEROUS ARE RRs?: The 5.56 per cent which the railroads earned on their investment in 1942—making them too affluent in the eyes of the I. C. C. majority—was actually almost the lowest rate earned by any class of the country's industries last year. The April economic bulletin of the National City Bank (N. Y.) lists the return earned by 69 different branches of industry in 1942. There were only four groups of the 69 (coal mines, hotels and restaurants, investment companies and miscellaneous transportation companies) which earned a smaller ratio of return than the railroads. Eight of the groups (including drugs and soap, soft drinks, machinery, auto equipment, shipbuilding, and construction) earned more than 15 per cent. Air transport companies earned 22.4 per cent and aircraft manufacturers 45 per cent. *That* part of the transportation business, at any rate, is being allowed to lay aside a generous nest-egg to protect and advance its post-war competitive position.

●

ARMY TRANSPORT VIEWS: Two Army officers, high in the councils of the Transportation Corps, are reported elsewhere in this issue as recording their full understanding of the indispensability of superior railway service to the efficient conduct of the war. They are Colonels Appleton and Lasher. The latter's emphatic and informed opinion is revealed in the account herein of the meeting this week of the Atlantic States Shippers' Board, at which he was the principal speaker, while Colonel Appleton's views are set forth in our report of his recent address to T. C. officers at Fort Slocum. Colonel Lasher warns that the big job of war transportation *still remains to be done,* and that provision for *transportation has been allowed to lag behind* production of war goods and the training of troops. His conclusions seem closely to parallel those expressed on the same subject in the editorial pages herein.

●

HELPED LICK ROMMEL: We might today be looking at maps of Palestine in the daily papers — instead of those of Tunisia — except for a certain brilliant transportation job, in which American railroads played an important part. This dramatic story is told in our account of Colonel Lasher's Atlantic Board address in the news pages herewith. A ship bearing vital supplies to the British 8th Army in Egypt was sunk—and a substitute shipment was so quickly assembled (thanks, in part, to American railroads) that it arrived only three days behind the schedule of the original vessel; and in time to help stop Rommel's eastward drive and start him racing westward.

●

McCARTHY ON POST-WAR: The war has shown how really efficient railroads are, when they can secure tonnage sufficient to use their facilities to something near capacity. This demonstration will not be lost on a "newly-educated generation of railroad economists"—so ODT's Henry McCarthy told the New England Railroad Club this week, in an address reported in our news pages. The role of freight rates in producing some such traffic volume as this in the post-war period affords a prospect for fruitful inquiry. Shifting locale of production and technological changes likewise pose problems whereof study proffers profit. Unless common carriers thoroughly comprehend these changes, and adapt their operations to accommodate them, there is danger that "our American distribution system will be set up in a manner which will simply not require as much transportation"—in the opinion of this discerning analyst.

●

PRESIDENT'S WAGE ORDER: The Southeastern lines on April 9 ceased presenting testimony on the pay basis for engine crews—taking the view that the President's "hold-that-line" wage-freezing order kills this case. Lawyer Donald Richberg for the B. of L. F. & E. thinks different, contending that this case is one of "inequity" in the comparative wages of one worker with another. The President's proclamation also occasioned discussion at the non-op hearing—but proceedings in both cases are continuing.

●

INVENTORIES SLUMP: Despite the large present need for materials—the railroads had smaller supplies on hand at the end of '42 than at the end of '41. The *ratio of inventory to volume of business* was the lowest ever. Stocks of rail and ties were lower in relation to consumption than at any time since '29. The status of inventories, road by road, and by important commodities and regions—with comparisons of previous years—is given in full tabular detail elsewhere in these pages.

CAR SHORTAGES: Shortages of freight cars have begun to be reported—small, to be sure, but *occuring in March!* An editorial herein draws attention to the fact that total freight cars increased only 10 per cent from early in 1940 to 1943 while traffic mounted 96 per cent. Ingenuity and efficiency in car utilization having already extracted almost 80 per cent more work per car, how could anyone reasonably expect that car shortages would *not* appear—the authorities having limited the supply as they have?

●

HOW ABOUT REST OF '43?: Car shortages having occurred in March, what will the situation be this fall? Our editorial discussion poses this question, pointing out that in 1942 traffic rose 28 per cent from March to October. Government authorities in control of the economy have permitted their attention to production to outrun their solicitude for equally-necessary transportation. They do not count upon weapons of war appearing miraculously—without component materials having been supplied. They do evidently expect, however, that transportation will be thus magically provided. The occurrence of car shortages this early in the year suggests that they are mistaken.

●

RRS & TRUCKS COMPARED: Colonel R. S. Henry has sent to railroad public relations officers a memorandum (reproduced in the news pages herein) setting forth in detail the known facts about comparative capacity and performance of railroads and intercity trucks. Railroad transportation output in 1940 (ton-miles) was 12 times that of intercity trucks (excluding farm trucks). Tonnage capacity of this category of trucks was about 4 per cent of that of all freight cars—indicating that the average intercity truck is on the move a larger percentage of the time than the average freight car is. This difference is not startling, because truck operators are not as generous with their vehicles—in allowing time to shippers for loading and unloading—as the railroads are with their cars. Moreover, the trucks operate only where they can find the most-remunerative traffic and load ratios.

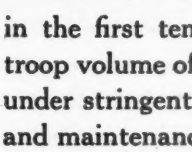
●

FATALITIES DIMINISH: In February 331 persons lost their lives as a result of railroad operation. In February, 1942, fatalities totaled 401. For the two months, 776 lives were lost this year and 825 a year ago. The records for injuries run in the other direction—3,486 in February, 1942, and 4,611 in that month this year. Further details of February accidents are summarized in the news pages.

●

DIESEL FUELING STATIONS: The principles which need to be observed to achieve efficiency in the lay-out of fueling stations for Diesel locomotives are outlined in an article in this issue. A distinction is made between roadside stations, where time-saving is the controlling factor, and terminal installations, where it is not.

Keep the Iron Horse Hauling!

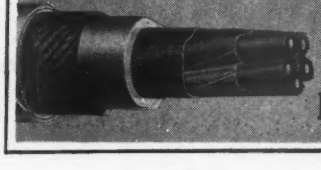


The Iron Horse in 1942 came up with a remarkable performance. The American railroads moved 1,354,500,000 tons of freight, the greatest in their history, and in the first ten months carried three times the entire troop volume of World War I. And this was accomplished under stringent limitations and restrictions of equipment and maintenance.

Under such severe service, rolling stock, trackwork and other equipment is wearing out. The railroads must be permitted to replace it when necessary—and in time. In view of the still bigger job awaiting them—it is our firm belief that, in the allocation of equipment and materials, the railroads should receive as high consideration as any armament manufacturer. Our Army and Navy must not be denied their tools of war for lack of transportation. Keep the Iron Horse hauling!

Okonite's understanding of railroad problems began with the design of insulated wires for the early telegraph systems, for the first automatic signal installation and has continued for every later electrical need . . . The Okonite Company, Passaic, N. J. Offices in principal cities.

3276



OKONITE

OKONITE
INSULATED WIRES AND CABLES

Fortune

Through this advertisement, appearing in the April issue of FORTUNE Magazine, we are calling the attention of industrial executives and government officials to the vitally essential nature of rail transportation and its equipment needs.

The Okonite Company

The Week at a Glance

YOU CAN'T QUIT: At least, Paul McNutt's commission has issued an order forbidding persons employed in specified essential industries—including railroads and equipment manufacture — from forsaking their present jobs for other work paying more money. There are some ifs, ands, and buts—which are recorded in the report in our news pages.

●

PULLMAN "TRUST" CASE: The 3-judge Philadelphia court which heard Thurman Arnold's attack on Pullman as a "trust" has sided with his views. A final decree has not issued but the court names conditions that it wants changed—among them (a) separation of the operating company from affiliation with manufacture, (b) requiring Pullman to operate cars built by any manufacturer, (c) permitting any road to operate some sleeping car service of its own, despite a contract with Pullman, (d) requiring Pullman to furnish through sleepers to any railroad desiring them, (e) eliminating the "exclusive" feature from Pullman contracts. The company plans to take an appeal. Further details are reported elsewhere herein.

●

TRAVEL DECALOGUE: Mr. Eastman has decreed that there shall be no extra train service this summer for civilian customers—except that which can be provided on week-ends by suburban rolling stock which would otherwise be idle. He urges vacationers to do all their holidaying at once (not taking several short leaves) and to do it near home; to go and come in the middle of the week; to travel by day, limiting Pullman loads; to carry lunch in a shoe-box instead of depending on dining car service; and to go light with the luggage. Even this won't be enough, he says, to prevent serious congestion of passenger services.

●

LAKES OPENING DELAYED: The weather man is not helping the war program. By May 1 last year 8.6 million tons of ore had been moved from the upper lakes, but, this year, the movement may not even be started before that date—the reason being the persistence of ice.

●

AMERICANS IN PERSIA: American Army railroad men, and railroad equipment manufactured in America, are hauling Lend-Lease munitions across Persia (Iran) to supply the Russians in their resistance to the Nazi invasion. Colonel Appleton has been out there, and he tells what he saw in a short article elsewhere in these pages.

●

TRANSPORT RIVALRY: If the railroads were, intrinsically, less economical than other agencies of transportation for the bulk of the nation's traffic, the large sums expended by the public treasury to develop and sustain other means of transportation would simply hasten the railroads' extinction. But there are too many shippers and receivers of freight who know the economy of railroad service, for its destruction to be politically or economically possible. It is demonstrable, however, that essential rail carriers cannot indefinitely lose traffic—diverted by mammoth and mounting tax aid to their rivals—and still maintain themselves unassisted. Since the service is indispensable, the kind of public treatment required to continue the service is likewise unavoidable. As an editorial herein maintains—opinion can decide whether to produce equal treatment of transportation agencies, either by subsidizing the railroads or *de*subsidizing their rivals. It cannot force the continuance of a policy which, in the long run, would deprive the nation of something of which it cannot and will not be deprived.

●

TRAFFIC FORECAST LOW: 10 per cent above 1942 was — and still is — the "official" forecast of the amount by which 1943 ton-miles would exceed last year's. This prediction was based on government figures of national production and how it would move. With this forecast before it, the federal allocators of materials skimped the carriers down to the bare minimum with which they might squeeze by with the predicted load. *But the actual traffic increase is running 150 per cent ahead of the prediction.* Figures are given in an editorial herein, supporting the conclusion that serious trouble lies ahead unless equipment and materials allocations are quickly augmented to bridge the gap between traffic forecast and actuality.

●

WOMEN RAILROADERS: There is a double-page "spread" in this issue of eleven pictures of women doing railroad work—hard and skilled jobs, too, most of them. Yard brakemen, machinist's helpers, draftsmen—these are some of the occupations the girls are shown filling, as well as other work which is less of a novelty. There are hurdles to surmount, of course, in getting women into some of these tasks, but the evidence is clear that their range of usefulness is wide—where necessity and determination unite to clear the track for them.

●

NEW RR MOVIE: An OWI "short" called "Right of Way" was released to movie houses (for free) on April 15—constituting a large step forward by the government in according some merited credit to the transportation people, both for the importance of their work and the efficiency with which it is being done. The photography is excellent and, on the whole, the production is a creditable job. You won't want to miss this picture when it hits your local cinema—and it will probably be an eye-opener to your non-railroad friends. It is an especially effective answer to anybody inclined to complain at the present quality of service.

●

SOFT WATER SAVES METAL: How softened boiler water saves scarce material is explored herein in an article by C. R. Knowles—with suggestions based on his extensive practical experience to show how this device can be most productively employed to this end.

VERSATILE ENGINEERS: Railway engineering work is an occupation calling for resourcefulness and ingenuity, even in normal times—because hardly any job comes up which doesn't have some "stump-the-experts" phase. This schooling in improvising is now standing the engineering departments in good stead—an editorial herein naming some noteworthy instances. The railroads don't get enough new rail, and breakages under trains rise—so the engineers shorten the detector-car inspection interval from 12 to 2 months. New structural uses are being found for wood, now that steel is playing hard-to-get. But the greatest scope for improvising appears to be in finding track labor.

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NORRIS CITY RECORD: The tank car terminal at Norris City—where the "Big Inch" pipe transfers its stream to the rails—hung up a record for itself on April 14, with 1,049 cars loaded, which ODT believes to be a world's record. A 75-car train moved out every 52 minutes on a single-track line normally handling only 4 or 5 trains daily.

●

DISCOURAGES TRAVEL: The Southern Pacific is spending money in advertising, to induce non-necessitous travelers to avoid its trains—an article herein describing and illustrating this campaign. Armed forces are given first call on the S. P., as elsewhere—and prospective civilian customers are urged to make this necessary process their voluntary contribution to winning the war, so far as their circumstances permit.

●

WANT THEIR UMBRELLA: The truck operators, who base their rates, not on the "inherent economy" of their service, but rather push them just as high as they can with a business-getting margin under the railroad rate level, are much distressed at the I. C. C. order reducing railroad rates. The umbrella has been narrowed and some of the boys are out in the rain—so they are praying the I. C. C. to leave higher l. c. l. rates intact.

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JUDGING THE JUDGES: The social effectiveness of a member of the Board of Investigation & Research is to be measured—not so much from his qualifications as to learning and character—but rather from his habitat and his predilections regarding the interterritorial rates controversy, according to the views of certain Congressmen, recorded in our news pages.

●

WAGE CASES: Hearings in the Diesel case were concluded this week, and the learned bench has betaken itself to a month's seclusion for prayer, meditation, pondering the evidence, scanning the auguries, and such other recondite processes as are required for arriving at decisions in such cases. The board hearing the non-op case has taken a short recess—possibly to permit some of the participants by inquiry to satisfy their curiosity as to whether Mr. Roosevelt meant what he said when he ordered wages frozen.

What's the Answer

(With acknowledgment to Railway Signaling)

SUBJECT:

Conserving Wires and Cables

QUESTION:

"What methods, of either a permanent or temporary nature, can be instituted at this time as a means of extending the useful life of existing insulated wires and cables in signal service?"

Items for Consideration

By F. J. WHITE
Electrical Engineer, The Okonite Company, New York

An answer to the above question will necessarily have to include not only existing installations, but also the handling of cable in renewals and in storage.

The majority of the cables used in signal work are rubber insulated and, as is well known, the aging of rubber is accelerated by exposure to light and heat. Therefore, cables should preferably be installed in such a manner as to keep them out of the direct rays of the sun and in as cool a location as possible. On existing work, moving or shielding them, if at all practicable, is well worthwhile and will unquestionably increase their life.

In buildings, cables should be kept away from boilers, steam pipes or other hot locations, or means should be provided for cooling the air surrounding them. If this is impossible, some of the special types of heat-resistant insulations can be used, but even these are adversely affected by high temperatures, as is also the current carrying capacity of all types.

Sheaths and fibrous coverings should be repaired as soon as the damage is noticed. Outer braids on aerial cables should be painted when the outside surface has obviously dried out. Wherever braids, fibrous coverings or tapes have rotted, they should be covered with tape and paint. Do not nick the insulation at the ends for identification purposes—use tags! Also protect exposed rubber insulation at terminal boards with stockings or tape, but do not use cord, because it cuts into the insulation. It should be noted that rubber, protected by a suitable synthetic compound, does not need such protection.

Periodic inspections of terminal boards and boxes should be made to see that water or other injurious material is not present. Care should be taken to see that cables are not subject to chemical and oil drippings. Periodic megger tests will indicate weak points, which should be traced and eliminated wherever possible. It cannot be too strongly stressed that, to obtain the longest life out of cable, the greatest possible care should be used in installing, splicing and terminating.

The care of wires and cables in replacement stock is very important. They should be stored under cover, off the ground, in as dark and cool (not cold) a place as possible and protected from falling objects. Cool, dark storage reduces the natural aging to a minimum, especially of rubber insulated cables. Careful storage protects cable and reels or other packing from deterioration.

Reels represent an investment by the customer, which cannot be recovered if deteriorated. Rotted reels may collapse during installation and cause serious damage to the cables thereon. Do not remove the lagging from reels until absolutely necessary. If lagging has to be removed or replaced, be certain that loose nails do not drop into reel between turns of cable or be driven into reel at an angle so that they protrude inside and possibly puncture the cable. Always tape up or otherwise seal the ends of cables after a cut has been made. Prevent damage to cables either mechanically or otherwise before actual installation. All of this simply sums up in the thought that if you are kind to your cables, they will show their appreciation in longer life.

A word here about the necessity of conserving all essential materials would not be out of place. Short pieces of multiple-conductor cable can easily have their outer braids cut off, and the individual insulated conductors used for various purposes. It might be well worth-while to splice odd lengths of cable that are not too short.

All of the copper, lead, and rubber compound from old cables should be reclaimed so that this material can be processed for other purposes. Rubber compound can be removed from wire by running through crushing rolls. Old lead sheath can easily be removed and used for many shop purposes. While all this might seem very obvious, no opportunity should be overlooked to call attention to the fact that every means must be adopted to save basic raw materials.

For reprints of this advertisement or further information concerning electrical wires and cables, write **The Okonite Company, Passaic, N. J.**

The Week at a Glance

TO "DECONGEST" YARDS: The yardmaster has plenty to worry about in moving trains through his yard—without considering, unless his superiors remind him, how work he does may save work for the "next fellow," who, maybe, is in a worse fix than he is. An editorial herein tells of a badly congested yard where trains were switched in cuts averaging only 4½ cars which became relatively fluid, with cuts averaging 24 cars, when yards as far as 500 miles away were required to do needed switching, instead of passing it along to this yard to do. Grouping cars in solid destination blocks at initial terminals wherever possible is requisite to good railroading today—even though the beneficary *seems* to be another line. The "other fellow's" grief is now everybody's concern.

●

WHO WANTS EQUAL PAY?: The objective of the New Deal "planners" is to bring about a nearer and near degree of equalization of incomes. The leading editorial herein suggests that few people really favor this development. "Sharing the wealth" with those whose incomes are larger is a pleasant prospect, but not divvying-up with those lower in the scale. Figures are cited, indicating that the average track laborer gets 52 cents an hour, a passenger engineer is paid $1.56, and the average division officer draws $1.73. Railroad employees in the higher brackets would gain little if their incomes were equalized with those of division officers, but they would lose plenty if they began to "share the wealth" with those at the bottom of the ladder in ability, training and income.

●

WHY UNEQUAL INCOMES?: Economic progress has always come from the exertions of those whose abilities are above the average. Under a system of free enterprise, the man of higher productivity never gets *all* of the excess of his product over that of the average—most of the increase in wealth he creates is shared by everybody. Despotic coercion can force a man to physical labor, but not to the use of his brains. The editorial discussion wants to know what the country is going to do for a rising standard of living if it destroys all incentive to do so on the part of those who alone can provide the improved devices, organization, and methods with which to raise living standards.

●

OWI TRANSPORT REPORT: The Office of War Information has issued a "factual" report on transportation (i.e., not intended as propaganda, to tell only the happy aspects of the story—but to be candid about the less favorable things too). The quality of present railroad service is contrasted with that of the last war—with the account strongly in favor of conditions this time. In this issue are presented the findings on passenger transportation (saving the observations on freight for a later date). O. W. I. warns civilians to stay home, unless travel is unavoidable—and it pays special attention to what it believes to be discrimination by the transportation industry against Negro Americans (the industry allegedly being, in places, loath to hire them, and permitting burdensome working conditions in some jobs in which colored employees predominate).

●

EASTMAN ON WPB: After all this time, ODT Director Eastman is at last a member of the War Production Board—so, possibly now, transportation's material needs may have a chance at a somewhat more direct audience in the place where final decisions are made. In the last war Director General McAdoo was a member of the President's War Cabinet, and he had the power to see to it that transportation got the materials it needed. Other aspects of the government's relations to transportation in this war are a vast improvement over those of the last one, but not the attention given to material requirements—possibly because the importance of good transportation is something difficult for people to appreciate until they fail to get it.

●

COL. HENRY ON DIXIE RATES: When Colonel Bob Henry speaks of the interests of the South, he talks with great authority—both as a loyal son of Dixie and as one of the most learned historians of that region. In a speech at Nashville, reported herein, Colonel Bob declared to his fellow-townsmen that the tumult over equalization of class rates "is based on the constant repetition of statements which are not true"; and that such equalization, if achieved, will lead to "parity" of all rates —to the great damage of the South's agriculture and industry. Discerning Southerners might reflect that it is just possible that Colonel Henry may be somewhat better informed of the South's situation, and maintain somewhat less synthetic a zeal for its welfare than, say, such a recent arrival in Dixie as David Lilienthal of the T. V. A.

●

WHAT IS A CARRIER?: The Railway Labor Act does not authorize the I. C. C. to determine whether a particular employer is a carrier or not. So the commissioners have decided, 6 to 5, in a case reviewed herein which involved the question of whether employees concerned in moving trains for a Nevada copper company over the lines of the Nevada Northern are employees of a carrier by railroad. The I. C. C. says it can determine whether an operation is a carrier job or not, under the terms of the Interstate Commerce Act but not under the Railway Labor Act. It was the latter and not the former act which was invoked by the petitioners (the engine unions and the S. U. of N. A.).

●

DIESELS FOR SHORT LINES: An interesting and profitable experience of the Atlanta & St. Andrews Bay with Diesel-electrics used both for switching and line-haul is related in an article herein—with comparable figures for steam operation. For this particular type of installation, the Diesel appears to offer some rather attractive advantages.

T. P. & W. EFFICIENCY: This paper has secured official figures filed with the I. C. C. bearing on production per employee and unit wage costs in train and engine service on the T. P. & W. under the management of President McNear, as compared with O. D. T. control—in which regime the so-called "featherbed" wage basis and working conditions have been applied. The comparison are tabulated in an article elsewhere herein—and the reader can readily judge therefrom for himself where the merits lie in this controversy.

●

WHAT RRs NEED: Rail, locomotives and cars are the things most needed by the railroads to keep their service on a par with demand—so Ralph Budd told a U. S. Chamber of Commerce meeting in New York this week, as reported herein. Mr. Eastman disclosed his views as somewhat more modest than Mr. Budd's on what the railroads ought to have. Meantime, in Washington, a WPB official revealed that ODT estimates of railroad steel requirements for the third quarter had been trimmed—suggesting that there threatens to be a considerable hiatus between railroad needs and what the carriers will get. WPB still bestows its favoritism on material uses which are connected with the war—not more directly, but more spectacularly—than efficient domestic transportation.

●

NAM's WISE PRINCIPLES: The National Association of Manufacturers has issued a pamphlet on the principles which must be followed by business and industry to avoid the kind of conditions which will invite, or even compel, the nation to turn to socialism. This remarkable document—showing great understanding and insight—has definite implications for transportation, which are discussed in an editorial herein. The Manufacturers expose, with great clarity, *why* public "investment" is no road to prosperity; and with equal persuasiveness why there is no future for private business if it persists in monopoly practices.

●

THRIFTLESS POLITICS: People see the government building a dam or a superhighway or a power plant—and few of them understand what the difference is to the public welfare in these ventures, from similar capital activity by private business. These government enterprises "make jobs," don't they? They produce transportation or power which "benefit" the users, don't they? Such edifices "make business" for suppliers of materials, don't they? These questions can all be answered in the affirmative—and the chances are that these government "investments" are still uneconomic and wasteful. The reason is: *There is no control on such public works, to locate them where the need is greatest or to induce them to choose the most economical instruments for the job.* A private industry would put its power plants where there was a market for electricity. Votes locate government power projects—hence not where the outlay will add most to total national well-being.

HOPPER CARS EQUIPPED WITH DREADNAUGHT PAN DOORS

ARE PROTECTED AGAINST LADING LOSS

THE PAN AND FLANGE COMBINATION PROVIDES STRENGTH AND RESISTANCE TO BENDING.

DESIGNED FOR ANY TYPE OF HOPPER FRAME OR LOCKING MECHANISM.

FOR USE ON NEW CARS OR REPAIRS.

STANDARD RAILWAY EQUIPMENT MFG. COMPANY

HAMMOND, INDIANA

WORKS: HAMMOND, INDIANA — NEW KENSINGTON, PA.

CHICAGO OFFICE — 310 S. MICHIGAN AVE.

The Week at a Glance

GOLDEN RULE IN REVERSE: How the government treated itself as a railroad management when it was running the carriers back in 1918 presents a mighty significant contrast to the way it treats private railroad managements, under similar circumstances, now. Just 25 years ago at this season of the year Mr. McAdoo was ordering 100,000 freight cars and over 1,000 locomotives—which may be compared to the miserly trickle of new rolling stock which the WPB is currently permitting. Then, the railroads raised freight rates a billion dollars a year. This time rates have been reduced one-third billion. Other equally-startling contrasts between the two periods are outlined in an editorial herein.

●

DIESEL REPAIR FACILITIES: Considerations which need to be taken into account in the provision of plant for the repair of Diesel power have been given a thorough canvass by an A. R. E. A. committee, and the conclusions reached are outlined in an article herein.

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WHY BETTER BRAKING?: Since warfare is hot-housing the mechanical improvement of non-rail transportation, especially aircraft—without any effort or expense to commercial users—the railroads and associated industries need to direct special energy and intelligence in a parallel direction, even to hold their own competitively. Faster post-war freight trains will be one of the railroads' urgent needs, and improved braking is a necessary adjunct thereof. From this practical commercial standpoint, a paper herein by Westinghouse's chief engineer examines the prospects for better brakes.

●

RATE THEORY IN COURT: The railroads have won a Supreme Court case, which permits them to omit a loading charge for handling cotton to destinations where competition is a factor, and to exact such a charge where competition requires it. In a dissent, Justice Douglas insists that loading cars with the same commodity on the same siding (but for different destinations) is "service under the same circumstances and conditions," in which the law says there shall be no discrimination. The judge may be a smart lawyer, but your observer wouldn't envy the mark he would get on a job of economic analysis, if he thus sought to dismiss entirely the demand factor in evaluating an economic service.

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SOCIAL GAINS (IN QUOTES): Society, in its scientific sense, includes everybody in the community—from poorest to richest. Social gains, therefore—if the term is used honestly and accurately—mean developments which *benefit everybody*. The leading editorial herein—in discussing the threatened coal strike—draws attention to the misleading use of this appellation as descriptive of the special favors bestowed upon labor leaders in recent years. It is certainly *no genuine social gain* that there be a coal strike in wartime—nor that preventive or punitive measures cannot be taken against labor leaders to forestall such a catastrophe. And yet, "social gains" is the dishonest term which is constantly applied to the New Deal measures which have given labor magnates immunity from the legal restraints on monopoly, enjoyed by nobody else.

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MANPOWER MONOPOLISTS: Practically unanimous public opinion (that is, the voice of *society as a whole*) strongly condemns labor leaders who operate contrary to the interest which all of society has in winning the war, quickly and effectively. But who gave these manpower monopolists in control of the unions their unequal privileges, deceptively labeled "social gains"? When people knowingly leave the hen-house door open, are they not accomplices of the fox?

●

MORE BAD ALLOTMENT NEWS: The WPB has announced that its Requirements Committee has made an overall reduction of 23 per cent in requests of the "claimant agencies" (of which ODT, speaking for the railroads, is one) for materials allocations in the third quarter. The WPB didn't say which of the claimants fared worse, or better, than the 23 per cent average—but it did reveal that it trimmed its claimants even worse than 23 per cent on carbon steel (20 million tons asked for and less than 15 million tons available).

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LABOR FROM MEXICO: The War Manpower Commission has, at long last, announced that 6,000 badly-needed track laborers will be admitted to this country from Mexico. This concession is hedged high with the type of restrictions so cherished of the bureaucratic mentality. If a Mexican workingman is trained in a craft and wants to come here, he is out of luck—only unskilled may be admitted. It is stipulated that rates of pay must be the same as those paid Americans and that the migrants may not be used "to displace other workers." The Manpower Commission will interpose "machinery" to settle differences which may arise between the visitors and their employers. The arrangement is a deal between the U. S. and Mexican governments. In the unenlightened days before we enjoyed the gift of so many "social gains," a workingman in need of a job and an employer seeking help did not have to wait around for the unraveling of months of governmental red-tape before they could enter into a mutually-profitable relationship. Anyhow, the 6,000 will be a help—even though they are few and a long time getting in.

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C B & Q BREAKS BOTTLENECK: A considerable segment of the Burlington's busy Aurora-Savannah line (mostly single track) is now operated under C. T. C., by an installation described in an article in this issue. Average road time saved on freight trains is 32 minutes, and a difficult situation occasioned by bunching of trains in limited area has been greatly alleviated.

TO WARN TRAVELERS: The A. A. R. directors reached an agreement at last week's meeting to lend their support to the ODT program for discouraging unnecessary travel—and Mr. Pelley issued a statement outlining the situation, as is recorded in the news pages herein. His advice may be summarized somewhat as follows: Stay home if possible; if not, pick out the less frantic periods of week and day to do your journeying.

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TRAFFIC FORECAST: The Department of Commerce estimates that freight and passenger traffic combined, this year, will run 16 per cent ahead of 1942. It observes that the increase was 28 per cent in the first quarter, but that this increase cannot be maintained throughout the year because the transport agencies are already utilizing their equipment at or near capacity. From the penurious way in which the WPB is doling out transport materials, it is evidently unaware of these Department of Commerce (and other similar) forecasts; or, knowing of them, it just doesn't give a rap.

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SUBSIDY SOCIALISM: If business people don't want socialism in this country, they must *act*—not just talk—accordingly. There is a pointed communication from a reader, published herein, politely suggesting that the argument over whether the railroads should accept subsidies or not will be decided by present subsidy-hunters. If they continue their present course of demanding and getting more and more, what regard for principles can ultimately save the railroads from accepting similar aid?

●

IF MINERS STRIKE: Some of the things which will happen on the railroads if a cessation comes in coal production are revealed in orders which were cooked up on May 1 and 2, before Mine Manpower Monopolist Lewis graciously permitted his minions to go back to work. For one thing, an order was issued making the railroads custodians of all coal in transit—directing them to deliver none to consignees with more than 10 days' supply on hand. Also, Mr. Ickes asked Mr. Eastman to eliminate all unnecessary passenger travel.

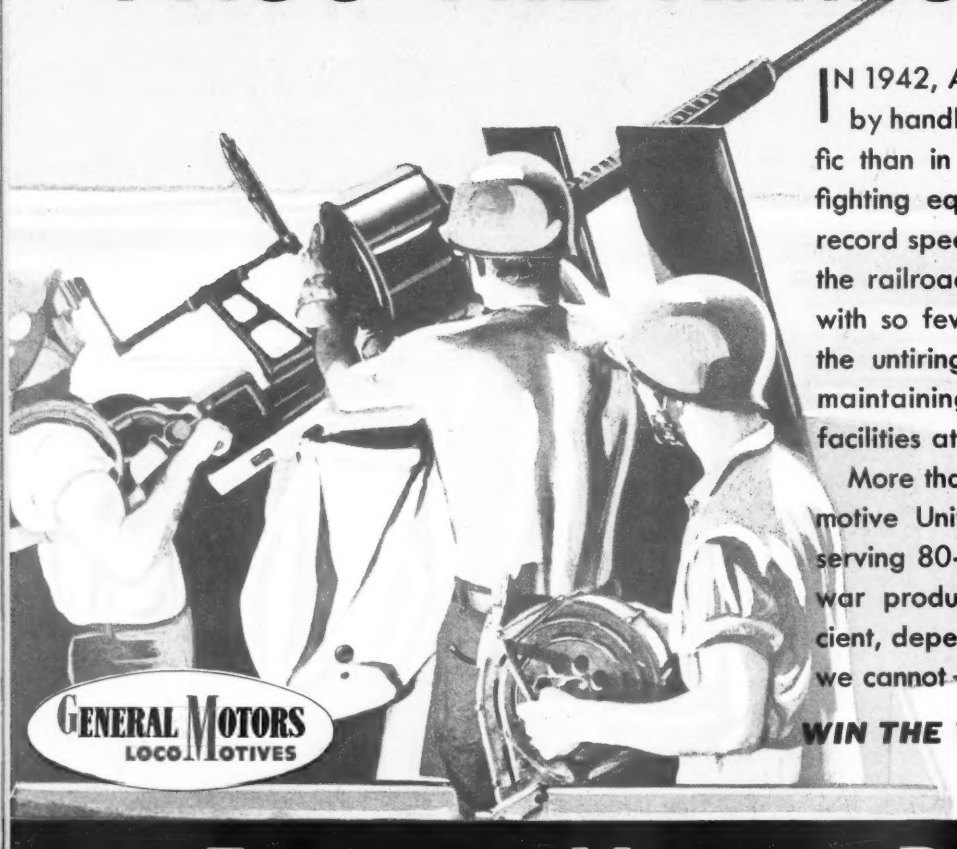
●

UNION LAWYER'S LOGIC: The argument of Lawyer Mulholland — reported herein — for the non-ops' wage increase is an unusually perfect specimen of the heads-I-win-tails-you-lose genus. He cites increased earnings of the railroads as a whole as a justification for wage increases—but he denies the validity of the penury of some lines as a defense against such increases. The rate of railroad earnings, thus, is used as an argument for higher wages—but its application as a limiting factor on wages is denied. That an intelligent man would risk such inconsistency in a serious presentation before learned men is commentary enough on his estimate of the degree of straight thinking which confronts a union lawyer in the pursuit of his professional duties.

We're Keeping 'Em Rolling

SO THEY CAN

PASS THE AMMUNITION...



IN 1942, American railroads broke all records by handling more freight and passenger traffic than in any previous year — moving men, fighting equipment, materials and supplies at record speeds. Never before in all history have the railroads delivered so much transportation with so few locomotives and cars — thanks to the untiring support of railroad personnel in maintaining such equipment and supporting facilities at peak efficiency.

More than 1150 General Motors Diesel Locomotive Units, in all classes of operation, are serving 80-odd railroads, heavy industries and war production plants — providing fast, efficient, dependable transportation, without which we cannot —

WIN THE WAR AND WRITE THE PEACE

GENERAL MOTORS LOCOMOTIVES

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION — LA GRANGE, ILLINOIS, U.S.A.

The Week at a Glance

BOY BRAKEMEN: The Illinois Central is enlisting 16-year-old boys as firemen, brakemen and switchmen—and is putting them through 10 days' training at a school established for the purpose at Carbondale, details being reported in a short article herein. Instruction given is thorough and the teachers are men with good records for safety, understanding of their jobs, and ability to teach. It is emphasized to the youths that their jobs are temporary, and they are urged to save their wages as a fund with which to complete their post-war schooling. When the boys go back to school, they will be given leaves, protecting their seniority rights.

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DRIVE FOR GRAIN CARS: The Car Service Division has now undertaken the job of building up a supply of cars for this year's seasonal grain movement on Western lines. Eastern and Southern carriers have been directed to hasten the return of cars of Western ownership suited for grain loading. Shipments from Western territory into the East are to be concentrated in cars of Eastern ownership, so the Western carriers can keep their cars at home. The winter wheat crop this year is less than last year's, but there is more space at terminal markets for it—so the railroads' seasonal moving job will be a bigger one.

●

C. T. C. HELPS S. A. L.: On 65 miles of single track south of Savannah the Seaboard has increased its capacity and reduced train delay by installation of centralized traffic control, as is related elsewhere in these pages. As many as 40 trains daily, and occasionally even more, are operated on the S. A. L.'s 107-mile line from Savannah to Gross, and the 65 miles equipped with C. T. C. are the part of the line where most of the meets and passes occur. Time-saving from this improvement to freight trains alone is estimated to average an hour—which not only expedites war traffic, but adds to the motive power supply and reduces unproductive consumption of coal and water while trains are idle on passing tracks.

●

TIE OUTLOOK: Current problems (and they are many) of tie producers and consumers were thoroughly canvassed at the recent meeting, reported in this issue, of specialists in this field. The biggest problem is one of getting labor, and the consensus is that Selective Service should show the same concern here as it does for farmers. The tie men also heard some instructive papers on the general railroad situation (especially from a track standpoint) and on timber conservation.

●

TRAFFIC RISE PERSISTS: Freight traffic (revenue ton-miles) is estimated in the leading editorial herein to have exceeded, in the first quarter, that of 1942 by more than 30 per cent. For the first third of the year the increase appears to have been about 29 per cent. Current allocations of materials to the railroads were based on a forecast of an increase, this year, of only 10 per cent, and no upward revision has been made in allocation to compensate for the excess of actual traffic over the forecast. What is the matter with the WPB anyhow—are its statisticians dozing, or don't their superiors pay any attention to their figures?

●

SECOND QUARTER TRAFFIC: If the carloadings estimates of the Regional Shippers Boards turn out right for the second quarter, then revenue ton-miles for the period are going to be 29 per cent higher than in 1942. It is the I. C. C.'s Bureau of Economics and Statistics which makes this observation—as reported elsewhere herein. It will be recalled that the WPB made this year's frugal allocations of materials to the railroads on an estimate of a traffic increase of only 10 per cent. Can it be the intention to make that estimate come true by withholding so much material that the railroads cannot handle increased traffic in the second half of the year?

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PASSENGER TRAFFIC PAYS: In the 12 months ended with February, passenger traffic was handled at an operating ratio "roughly approximating" 74 per cent —according to an estimate by the I. C. C.'s Bureau of Economics and Statistics. Passenger business, that is to say, is for the time being substantially in the black. Simply to say that "increased traffic" has effected this result would, of course, be correct—but it might be more accurate to ascribe the outcome to the *elimination of red-ink trains.* A favorable passenger service operating ratio could be achieved with traffic much lighter than that now moving, if profitless trains were pulled off; and if the railroads, emulating their competitors, would haul people only where pay-loads are available.

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SUPERVISION YARDSTICK: One reason why large enterprises are not always as efficient as they could be is that top management doesn't always treat its foremen in a manner calculated to get from them the full measure of helpful service they can give. An editorial herein tells of a pamphlet issued by the N. A. M. which provides a self-analysis device by which an organization may appraise its effectiveness in dealing with its foremen. The principles evolved in this analysis are as applicable to railroads as to manufacturing enterprises.

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NITL CAR SAVING: The Emergency Transportation Committee of the National Industrial Traffic League has inaugurated a "save another car-day" campaign—thereby giving effect to advice by Commissioner Johnson, who impressed on these influential shippers the gravity of the prevailing car scarcity. The NITL expects to promote (1) more intensive car-conservation efforts by the Army, Navy and other governmental agencies, (2) more efficient use of cars by shippers, (3) reduction by railroads in car-turnaround time.

FIRST MEXICANS ARRIVE: The first installment (750) of 6,000 badly-needed Mexican track laborers for work on railroads in the Southwest have entered the country at Nogales. A similar number is to come in through El Paso in a few days. This temporary immigration has been made an extremely complex transaction, to cover an essentially simple situation—viz. the desire of railroads for help and that of many Mexicans for 40 cents per hour. But the bureaucracy is doing the job, so details have to be elaborately and leisurely manipulated by the Railroad Retirement Board, the War Manpower Commission and, presumably, counterparts of these organizations on the other side of the border.

●

MORE ON CARGO PLANES: A widely-discussed paper by the president of United Air Lines was published in our December 5, 1942, issue—that authority being rather inclined to discount the prowess of the plane to compete for freight now moving by rail. In this issue, E. S. Evans, manufacturer of loading devices for both freight cars and planes, presents a view of the plane's competitive attributes which is much more favorable to it than our previous presentation. Railroad men interested in what may be in store for air transport (as who among them isn't) will find much to ponder in Mr. Evans' article, whether they are able to follow him all the way to his conclusion or not.

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PATENT LAW: An editorial herein discusses the unfortunate situation of a patentee who is prevented by the war from marketing his product. The life of patents should be extended to compensate for the period when war prevents their exploitation, since experience has shown that the 17-year period is not unduly long to stimulate a healthy volume of innovation. At the same time, it is also contended that patents are socially justifiable only to the extent that provide the public with new products. There is need to restrict the time when a patent may be kept "on ice."

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THREAT TO SUPPLIES: The Senate on May 10 passed a bill to establish a separate office of Civilian Supply — out from under the WPB. Mr. Eastman opposes this measure, saying that the bill would require, in transportation, that materials needed for maintaining service for civilians would have to be sought from the new agency, while those required for war purposes would continue to be allocated by WPB. The new agency, also, would have the power to order rationing of transportation service. Mr. Eastman believes that an attempt thus to divide transportation between civilian and war functions would create a "chaotic and impossible situation." Certainly, any scheme which threatens to afflict allocation of materials to the railways with a worse distemper than that which it now suffers, is something which ought to be pondered carefully.

OKONITE SIGNAL CABLE SHARES A GOLDEN ANNIVERSARY!

This year the employees of the Central Railroad of New Jersey are celebrating the 50th Anniversary of the installation of the first electrically operated semaphore signal used on any railroad in the world. It was installed at Black Dan's Cut, Phillipsburg, N. J., in 1893. Its inventor, J. W. Lattig, in recognition of his inventive genius, was awarded the Franklin Institute Medal for a major contribution to the increased safety and speed of railroad service.

For the operation of this signal, the inventor relied upon Okonite insulated wire because, in his own words: "Okonite wire had been standard for many years on the railroad where I worked. It was the best wire we had ever used and therefore it was only natural that I used it when I invented this signal."

From this original automatic semaphore installation on the Jersey Central Railroad evolved the present day motor-operated light type signals used on railroads all over the United States. Today a modern electric semaphore signal, faster in its action than the original, stands in almost the same spot and controls train operations on the same line of the Jersey Central. Of course, the new signal, too, relies on Okonite signal wire. The Okonite Company, Passaic, New Jersey. Offices in principal cities.

THE OKONITE COMPANY

INSULATED WIRES OKONITE *AND CABLES*

3316

Freight Progress at a Glance

BIG VOLUME AIDS SHIPPERS: The unprecedented volume of freight now being moved by the railroads yields conclusive evidence of the *economy of railroad service,* given a volume which really makes full use of railroad plant. With "traffic units" in 1942 almost 50 per cent above 1929 and capital investment practically stationary, the capital cost per traffic unit was reduced one-third. Also, as the figures show, operating expenses per traffic unit were likewise reduced by 30 per cent. The significance of these figures to shippers lies in their demonstration that *the road to lower transportation charges lies in maximizing railroad tonnage*—not in encouraging the development of surplus transportation plant. This situation, so important to improved economy in transportation, is analyzed herein, in an editorial on page 979 and an article on page 1001.

●

CHIEF COLLABORATORS: The movement by the railroads of the present volume of freight—with virtually no increase in the physical means at their disposal—is a joint product of co-operation toward this common goal by several organizations and the individuals who compose them. These collaborating groups include the traffic departments of the Army and Navy, the organized shipping community, the regulatory authorities (O. D. T. and I. C. C.) and, of course, the railroads themselves. The top leaders of each of these institutions survey the present situation, with a look at the future, in an article on page 984. General Gross and Admiral King speak for the armed services, Mr. Eastman for the regulatory authorities, Messrs. Luddecke and Shafer for the organized shippers, and Mr. Pelley for the associated railroads. None of these gentlemen expects that the job is going to get any easier.

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EXECUTIVE DIAGNOSIS: Representative chief executives of carriers in the several territories survey transportation prospects in an article on page 989. M. W. Clement, acclaiming the understanding co-operation accorded the carriers by governmental agencies closest to them, believes the railroads need more such appreciation from the authorities in charge of "the physical and financial wherewithal." Ralph Budd lays special emphasis on the need for rail, for motive power, and for a more enlightened policy of taxation. E. J. Engel touches upon requirements for labor and more track facilities. E. E. Norris reveals his particular concern over the maintenance of public good-will. A. T. Mercier pays tribute to the sympathetic understanding evidenced by the press and radio. H. S. Palmer dwells upon the problems of transporting passengers and high-grade freight in an area of high concentration of population and industry.

●

UNUSUAL WARTIME JOBS: Some of the new transportation tasks (besides large volume) imposed by the war on the railroads are enumerated in detail in an article on page 994. The diversion of New England coal from coastline vessels to rail, with the necessary development of new traffic channels; the oil movement; a grain rush in mid-winter; the huge volume of perishables arising from the curtailment of trucking of this traffic, coincident with enlarged consumer demand; the job at the ports, and the difficulties arising from abnormal traffic direction—such are among the specific situations described, which are being dealt with.

●

TRAFFIC CONTROL: The vast volume of present transportation could not be performed—just by each railroad doing the work handed to it from day to day. Traffic has to be shifted from channels becoming congested to those more fluid, cars and locomotives must be transferred from quiet places to "hot" ones, service orders must be composed to counteract developing dangers. This job is a highly complex one, in which many agencies participate—the vast mechanism of successful organization being described, in its essential components, on page 1005.

●

INDIVIDUAL RAILROADS: The job of wartime transportation is, not of course, altogether—or even primarily—a matter of over-all organization. While these aspects are vital, and have been well attended to, the actual hauling is done by individual railroads—and by specific divisions and terminals. To get this large picture down to the details of which it is composed, the accomplishments of many individual railroads are summarized herein, beginning page 1009.

●

EQUIPMENT: Tight as the freight car supply is, the preponderant informed opinion is that—with important reservations—the present and prospective available cars will meet traffic requirements, with only isolated shortages. These reservations include adequate provision of manpower and materials for repairs—which are currently being seriously skimped. Car supply conditions are examined on page 1017. The locomotive situation and outlook are analyzed beginning page 1030.

●

TRACK: It is more difficult for government officials who are laymen as far as transportation is concerned to comprehend the carriers' needs for track materials than it is for them to appreciate the need for rolling stock. Trucks can bump along somehow on rutted highways, but, when broken rails are not replaced, trains stop entirely. Also, allocators of materials may find it difficult to realize that railroads are not just a wartime facility which the national interest permits to be used to exhaustion on the war job. Such treatment is proper for munitions plants, but a prosperous civilian post-war economy will require functioning railways—not a plant depleted into uselessness. Track facts and prospects based thereon are gone into on page 1022.

THE MANUFACTURERS: Besides providing the railways with large—though not record-breaking—quantities of equipment and materials, the railway supply industry has become one of the principal reliances of the armed forces for lethal weapons. The accomplishments of this industry in the national service are reviewed on page 1041.

●

FREIGHT PUBLICITY: Railroad patrons are showing a growing appreciation of railroad service—and a concurrent curiosity and interest in the mechanism by which such service is produced. An editorial herein draws attention to this development—and suggests that it is potentially of great value to the railroads. The more the customers are concerned with and appreciative of the importance of efficient railroad service to their self-interest, the less likely they are to fall prey to the lures of other agencies of transportation—when these get back on the job at the war's end. The editorial suggests that it will be well for the railways to stimulate their customers' attention while they are in a receptive mood; and, naturally, a principal means toward this end is the advertising of freight service.

●

NO GLAMOR GIRL: The freight train is no movie queen, with photographs in alluring poses in the picture magazines, but the old gal is nevertheless plugging away, ahead of all competition, as the assembly line of national productive efficiency. One reason the public hears about this faithful factotum so infrequently is because she is doing her job so well—being one of those dependable servants who has to fall ill before most people realize their dependence on her. Just what this Martha is doing in the way of nationally-vital work is revealed in the latest available figures in an editorial herein—674 billion ton-miles in the twelve months ended March 31, which is 66 per cent above 1918 and 51 per cent more than 1929.

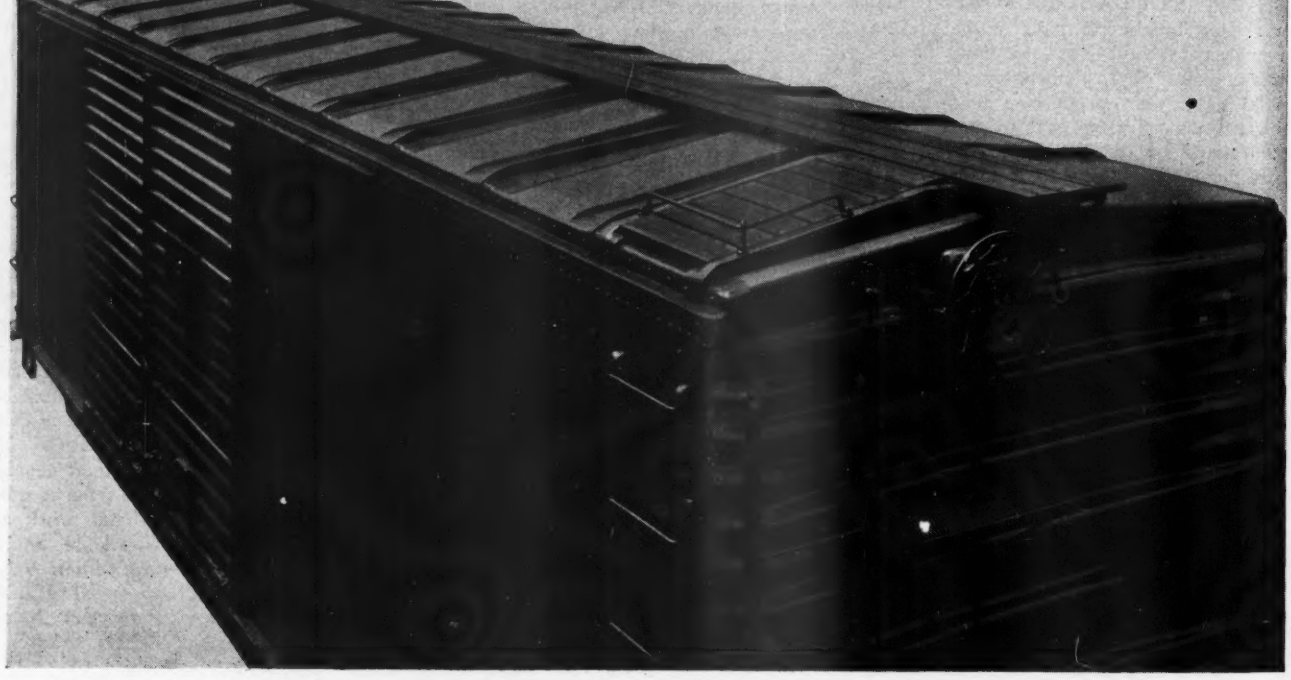
●

CANADA'S RAILWAYS: It is no coincidence—but remarkable nevertheless—that the increase in freight and passenger traffic volume on the Canadian railways adds up to almost exactly the same ratio as the increase south of the international frontier. Some of the more noteworthy aspects of the current performance of Canada's two great transportation systems are outlined, beginning page 1059 herein—dissimilarities as well as similarities to U. S. conditions being noted.

●

DIVIDE AND DISRUPT: Shippers and railway managers have their attention invited in an editorial herein to the grave dangers to them, inherent in a Senate bill which would establish a Civilian Supply Administration, independent of the War Production Board. Under such a set-up, the ODT, which has trouble enough getting materials for transportation with one board, would face the necessity of carrying its pleas to two such bodies.

IMPROVED SOLID STEEL ROOFS, STANDARD ON PRACTICALLY ALL RAILROADS, HAVE CONTRIBUTED GREATLY TO THE PHENOMENAL FREIGHT PROGRESS SHOWN BY RAILROAD ACHIEVEMENTS IN OUR PRESENT EMERGENCY.



THEY PROVIDE A DUST TIGHT AND WEATHER-PROOF COVER AND ADD TO THE STRENGTH OF THE SUPERSTRUCTURE.

STANDARD RAILWAY EQUIPMENT MFG. COMPANY

HAMMOND, INDIANA

WORKS: HAMMOND, INDIANA NEW KENSINGTON, PA.

CHICAGO OFFICE — 310 S. MICHIGAN AVE.

The Week at a Glance

MONOPOLY HURTS ITSELF: Competition in transportation cannot be avoided at the point where the money which supports the railroads and their suppliers is found—namely in the struggle with other agencies for traffic. It is to the advantage of everybody in, or supported by, the railroad industry, that the industry be efficiently armed to meet this competition. But can the best and most economical tools for this task be made available to the railroads if there is a minimum of competition, grounded on comparative merit and economy, in the supply of their tools and materials? The leading editorial herein raises this question, and concludes that monopolistic tendencies in the marketing of railroad supplies are operating to the detriment of the carriers' revenue prospects—and hence to the injury of the very people who foster the diminution of economic competition in the provision of railway supplies.

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TIME TO RETOOL? When the need for tools to make guns, planes and ammunition has been met, as it now appears to be—the logical "second table" on the tool supply should be the industry (i.e., transportation) which gets the munitions of war where they can hurt the enemy. An editorial herein suggests that, with present and prospective heavy demands on railroad shop facilities, the railroads can put better equipment in such installations to good use—in the country's interest as well as their own. The idea is broached that railroads survey their needs in this regard in relation to available supplies, which may be freer than is generally known.

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PASSENGER ECONOMICS: A recent I. C. C. estimate that passenger traffic now has an operating ratio of about 75 per cent is contrasted, in an editorial in this issue, with this ratio for the years 1929-41. In all of these years the ratio was above 100, except 1929 when it was 90. *And average passenger rates in the past twelve months have been almost one-third less than in 1929.* Experience demonstrates, therefore, that it is not high rates which make for profitable passenger operation, but *full trains.* Economy, both for the railroads and their customers, requires that trains be pulled off wherever there is not sufficient traffic in sight to provide full trainloads—and, as a corollary, where potential traffic *is* available, that rates be made sufficiently low to fill the trains. This is the way to give the public low rates, and also the way to keep passenger operations "in the black."

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MAKING DIESELS PAY: Diesel-electrics which operate by day in passenger service on the 157-mile New Haven-Boston line, and by night in freight service in the same territory, are rolling up the daily mileage required to get the most out of this class of power. A paper herein by Assistant Mechanical Engineer Hatch of the New Haven discloses details of operating experience with these locomotives while their schedules were being tailored to fit the unusual physical and traffic characteristics of this territory—an account which makes good reading from a standpoint of pure interest, as well as offering helpful suggestions to others whose job it is to adapt the use of a new type of power to their own peculiar circumstances.

●

A BOOST TO INFLATION: Unless the President or Judge Byrnes overrule the non-op "emergency board," these employees will receive a wage increase of 8 cents an hour. As memory serves, the only occasion in the past that the President withheld support from an emergency board report was when he wanted it to deal more liberally, rather than less, with the unions. These employees had already received wage increases in excess of the "Little Steel" formula, and it would take an extraordinary degree of casuistry to explain how a wage increase to them can be found to jibe with the Administration's announced policy for "holding the line" on wages and prices for the prevention of inflation. The wage rise is based on the loophole clause to "aid in the prosecution of the war or to correct gross inequities"—which words, quite evidently, can be stretched to excuse any wage increase which the authorities are inclined to favor, for motives which they do not have to name.

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ACTIONS SPEAK LOUDER: It is estimated that the wage decision, if approved, will cost the railroads 200 millions. In railroad hands, this sum would go largely into taxes, most if not all the remainder being added to reserves for rehabilitation and the maintenance of employment when the war ends. In short, in railroad hands, none of this sum would find its way into the market for consumers' goods, bidding up the prices thereof. As a wage increase, of course, all of this "purchasing power," except the modest percentage taken away in additional personal income taxes or personal savings, will now constitute a demand for consumers' goods—the supply of which is decreasing. No amount of sophistry could explain away the obvious inflationary effect of such a wage increase, if approved. It is not by words that dangerous price inflation will be avoided.

●

POACHING ICC's PRESERVE: The emergency board in its decision also invades the jurisdiction reserved by statute to the Interstate Commerce Commission. That is, it decides that its mulcting the railroads of this amount of revenue cannot be used as a basis "for increase in railroad rates or for resistance to justifiable reductions in such rates." What experience or authority these gentlemen possess which qualifies them to rule on the adequacy or inadequacy of railroad freight rates is not revealed.

***PRO* OR *PER*-SECUTION?:** One Arne Wiprud (*sic*), on the staff of the Attorney General has picked up the anti-railroad cudgel laid aside, however reluctantly, by Thurman Arnold when he donned the judicial ermine. This lawyer appeared before Senator Wheeler's committee this week, as reported herein, and objected with great vigor to the "conference method" of rate-making. He went much further than such mere legalistic quibbling against the opinion of all competent regulatory authorities, however, and castigated as "revolutionary" the program for all-round transportation companies, advocated by the A. A. R. and the Transportation Association—seeing therein a plot "to protect the railroads' investments regardless of the economic cost to the nation."

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FLOODS: Details of the traffic-blocking floods of the past week in the Mid-West are recorded in a short article in this issue. At numerous points, the highest water ever known was registered. Not only was service suspended on many lines and much detouring required, but important yards and terminals were flooded.

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CAB DEADHEAD DECISION: The "emergency board" which heard the case wherein the firemen's and enginemen's organizations demanded supernumerary employees in the cabs of non-steam power, and total weight or horsepower as the basis of compensation for engine crews on such locomotives, has handed down its finding. On high-speed Diesel passenger locomotives, the carriers are required to keep two men in the cab when trains are moving—which means, if the "fireman" has duties which take him away from the cab even momentarily, the railroads will have to hire a rider to sit in the cab to prevent the engineer from getting lonesome. With the foregoing exception, the bulk of the demands of the engine unions were rejected.

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MEXICAN LABOR: A valued friend reminds us that the Mexican labor coming in to alleviate, to some degree, the shortage in the track department, will receive a minimum wage of 46 cents—not 40 cents, as incorrectly reported by us. Our informant also believes that any involved official proceedings connected with this transaction cannot be laid at the door of government functionaries, but are necessitated by Act of Congress. This is undeniable. Limitations on freedom of action cannot be enforced by government officials unless Congress so directs or acquiesces; and Congress cannot do so unless the electorate approves. If employers are less free than they formerly were to hire whom they please, and workers less free to find work where opportunity affords—and both parties less free to agree with each other on terms of employment, without political intervention, such conditions undoubtedly arise because there are other concerns which the electorate prefers, at least temporarily, to its former freedom.

THIS BULLETIN...

Is the Most Comprehensive Ever Published on

Varnished Cambric Insulated Cables

Varnished cambric insulated wires and cables are ideally suited for numerous electrical applications.

The valuable information contained in this Bulletin should be in the hands of every man who has a part in installing, maintaining or buying insulated wires and cables for every electrical operation. It will tell him how varnished cabric insulated wires and cables will adequately and safely fill his requirements, and at the same time save critical war materials. A bound-in supplement gives consideration for increased loading under wartime conditions.

Bulletin OK-1013, just off the press, is the most comprehensive ever published on varnished cambric insulated wires and cables and shows in detail: Specification and test data – Underwriters' (N.E.C.) approvals – Shielding – Application range – Selector Chart – Protective coverings – Conductor designs – Construction data – Current-carrying capacities, 1 – in underground ducts, 2 – in conduit, 3 – in air, 4 – buried in earth.

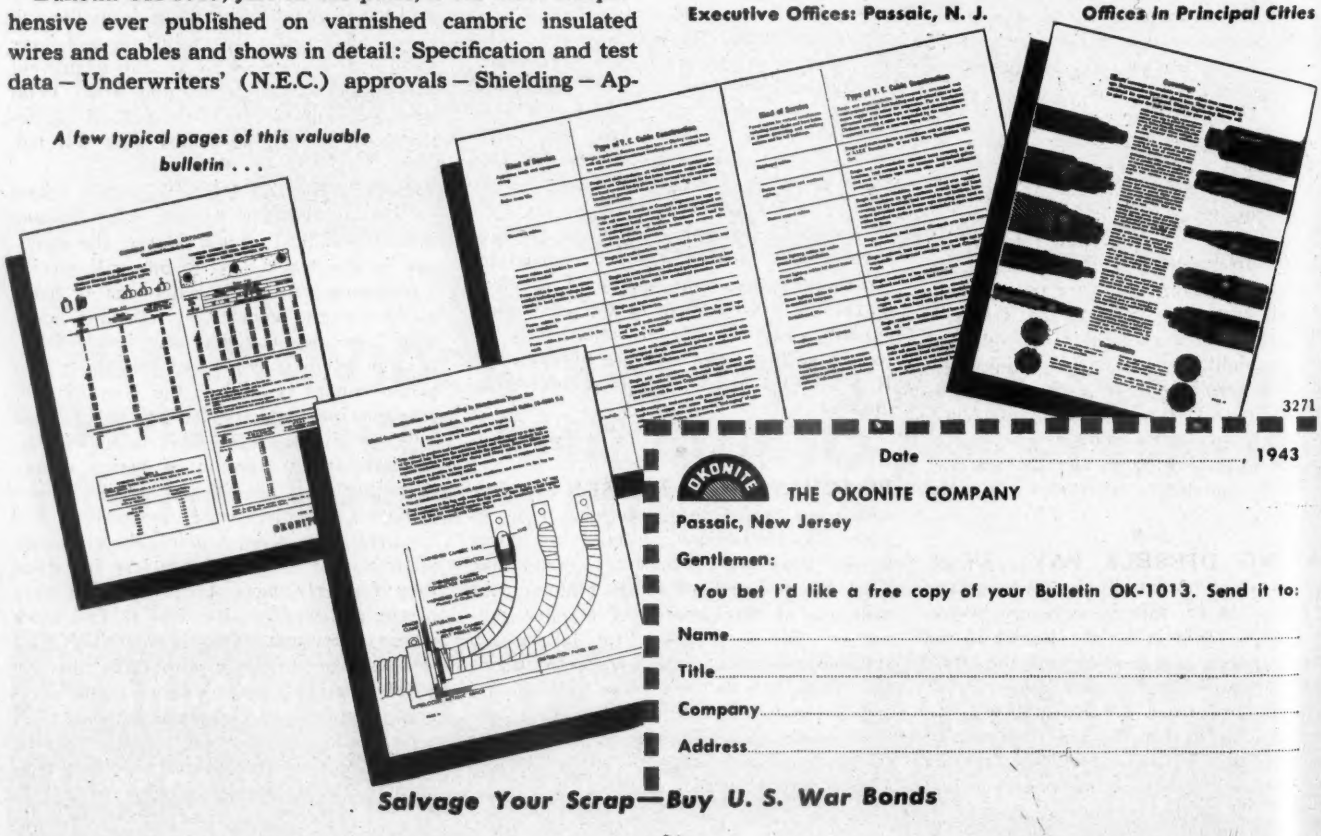
Correction factors for segmental conductors, non-metallic conduit and d.c. ratings – Voltage drop tables – Conduit capacities – Splicing instructions – Terminating without potheads – Essential purchase data, etc.

To get your FREE copy of this valuable Bulletin, fill out and mail the attached coupon *now*.

THE OKONITE COMPANY

Executive Offices: Passaic, N. J. **Offices in Principal Cities**

A few typical pages of this valuable bulletin . . .



3271

Date 1943

OKONITE THE OKONITE COMPANY

Passaic, New Jersey

Gentlemen:

You bet I'd like a free copy of your Bulletin OK-1013. Send it to:

Name.....

Title.....

Company.....

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Salvage Your Scrap—Buy U. S. War Bonds

The Week at a Glance

SUBSTANDARD DIVIDENDS: Since "hardship" or "substandard" arguments are being used successfully to thaw out the alleged "freeze" on wages, the just claims of railroad stockholders cannot continue to be slighted. A New Deal "emergency board"—in contradiction of the administration's proclaimed opposition to inflation—has recommended railway wage increases of more than 200 millions a year; money which will be deflected from taxes and reserves into bidding up prices of consumers' goods. Meantime, railroad stockholders received only 196 million dollars as dividends in 1942 (compared to 2932 millions paid in wages). Payments to stockholders in 1942 were 46 per cent *less* than the average for the 1920-30 period, whereas wage payments were somewhat more than the Twenties' average. An editorial herein suggests that dividends be increased, since private enterprise cannot function unless owners receive satisfactory remuneration, which nobody can contend they are now doing.

●

WARNS SUPPLY CO's: War plants, whose managers are looking around for post-war markets, have fixed their eyes on the railroads—and manufacturers already established in this field may be faced with some pretty vigorous competition. So Chief Engineer Perlman of the D. & R. G. W. revealed to members of the Railway Business Association, as recorded in the news pages herein. Mr. Perlman suggested that manufacturers seek now to improve their products and otherwise prepare themselves so that, by better service to their customers, they may continue to enjoy their trade. He also bespoke the co-operation of the supply manufacturers with the central research organization being established by the A. A. R.

●

OIL NEARS MILLION MARK: The railroad petroleum movement creeps upward toward the goal of a million daily barrels. It is a case of the last 100 thousand—not the first 100—being the hardest. An article herein details the expedients being adopted to squeeze out the ultimate in performance from available facilities—these including the steady perfecting of routing arrangements, and the use of steel drums and other containers which convert non-tank cars into vehicles for petroleum products.

●

EFFICIENT YARD TOWERS: Yard control towers which forethought has made convenient for the function they must serve—such are the facilities, described herein, provided by the Burlington at Galesburg yard. Fire-resistant, these towers have wide windows for unobstructed vision; heat-absorbing and glare-resisting glass; overhanging eaves; roof insulation; inside sanitation.

●

TAX-AIDED BUSINESS: Some segments of business and industry apparently are finding it very hard to swallow the "free enterprise" medicine which leaders of industry are prescribing with such vigor, intelligence and apparent sincerity. An editorial herein reports a speech by a leading spokesman for the automotive manufacturers who predicts a rosy post-war future for his industry *predicated upon large-scale government spending in improving highways around cities,* thereby extending the market for motor vehicles. In other words, he foresees greater prosperity in highway transportation—but only at the price of greater socialization; making his program very hard, indeed, to distinguish from the fondest dreams of the National Resources Planning Board.

●

WHO PAYS THE FIDDLER: The speaker mentioned in the foregoing fearlessly demanded freedom for the transportation industry from federal meddling—that is, so far as regulation and otherwise policing the industry's operations is concerned. In this area of government relations to business he is an individualist of the most rugged stripe. But he does not carry his opposition to governmental participation to the impractical length of refusing federal funds for additions to plant. No indeed. The railroads are the only segment of the general transportation industry so quixotic as to refuse such proferred gold—which might enrich them but would tarnish their principles. Their less squeamish neighbors seem to deem the pay which comes their way an ample recompense for the socialization they thereby accept; and they eagerly and openly solicit for more.

●

MONEY FOR STUDY BOARD: The Senate has passed and sent to conference its version of an appropriation bill—included in which is $350,000 to continue for another year the work of the Board of Investigation and Research, operating under the Transportation Act of 1940. The Senate also, sad to relate, threw in $200,000 for the National Resources Planning Board—the group of sociologists, landscape gardeners and do-gooders which, without statutory authority, has adopted a revised "Bill of Rights" and is otherwise scheming to make the country over on a socialistic pattern of bureaucratic paternalism.

●

BORROWING TO SAVE: The B. & O. has been authorized by the I. C. C. to finance 3½ millon dollars' worth of new equipment by selling a trust issue covering practically the entire cost of the purchase. Some question had arisen of the I. C. C.'s view of this transaction, but it took its position because the railroad proposed to use the cash, which it might have used to defray all or part of the cost of the equipment, to buy in funded debt at a discount. That is to say—despite new equipment issues—the company's action will reduce its indebtedness more than if it paid for its equipment all or part in cash; and reduction in fixed charges will be greater too.

BAD NEWS FROM WPB: Some hint of the enormous complexity of the process of materials distribution—when it is done by allocators rather than by normal market action—is given herein in an able paper by W. P. B.'s D. W. Odiorne. The Rolling Stock Chief also reveals the meager outlook for adequate additions to equipment. There are, in addition to the O. D. T., *no less than eight other "claimant agencies" for railroad rolling stock.*

●

OP EMERGENCY BOARD: The emergency board which will begin at New York on June 7 its hearing of the demands of the transportation unions for 30 per cent more money (a minimum increase of $3 per day) is composed of three "old-timers" at this class of work. Heading the board is Judge Stacy, who was on the board which refused to reduce wages along with the catastrophic decline in railway earnings in 1928. Another member is Professor Sharfman, who just finished handing the non-ops more than 200 million dollars a year of the railroads' money—despite the fact that their pay status already satisfied the "Little Steel" formula. The third member is Frank Swacker, who was on the board which denied to engine crews most of their "Diesel pay" claims.

●

ENGINE LEADERS ANGERED: It would be an understatement to record that the heirarchy of the engine unions are dissatisfied at the recommendations of the board which heard the Diesel pay case. They say they have been "insulted." What is an emergency board for—they seem to believe—if not to prevent concessions to railroads when they are hard pressed, while conversely blindly awarding to unions in the neighborhood of 50 per cent or more of any demands they choose to make? The B. of L. F. & E. general staff is meeting in New York this week in a truculent mood—an attitude which, as they doubtless remember, proved profitable to them back in December, 1941.

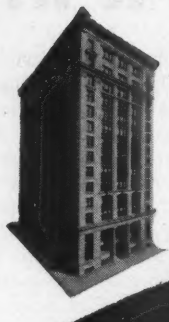
●

FREIGHT RATES & PRICES: Freight rates represented only about 7½ per cent of the delivered cost of commodities in 1941. This is another way of saying that a 10 per cent increase in freight rates would cost the consumer less than 1 cent on a dollar's purchase—or a 10 per cent freight rate decrease would save him less than a cent per dollar spent. This ratio of freight rates to value does not, of course, hold true for all commodities. Rates are a big part (29 per cent) in the cost of mine products, but less than 5 per cent of the delivered price of manufactured goods. Details are given in an article elsewhere herein.

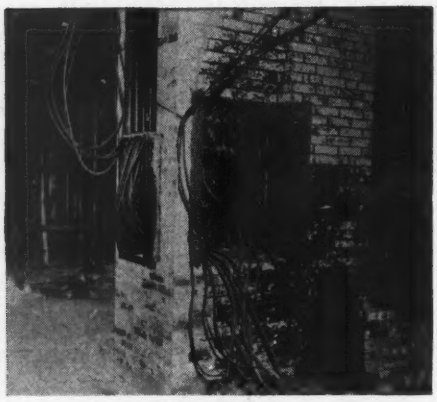
●

BIG POWER FOR DMIR: The Duluth, Missabe & Iron Range has ten new 2-8-8-4's, described and illustrated herein. They haul 6000 gross tons (maximum adverse grade 0.62 per cent) without a water stop between terminals, and carry enough fuel for a round-trip.

GOOD WIRING PAID



twice!

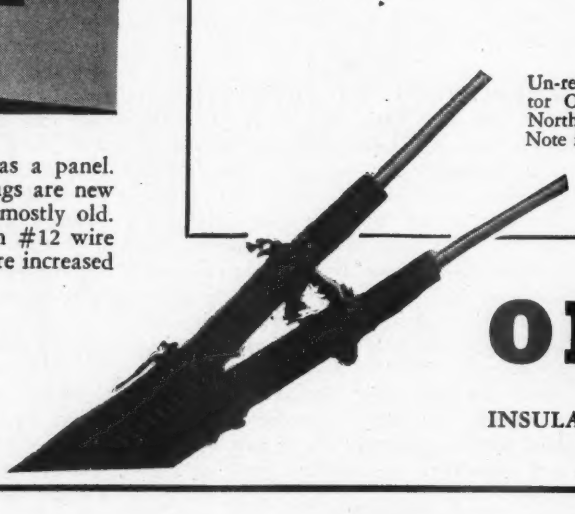


• New and old junction boxes for the riser cables are side by side. "This building had an unusual first-class job of old-fashioned wiring and as a result we were able to use a good deal of it," said the electrical contractor.

• Each end of each floor has a panel. Receptacles, switches and plugs are new but the lighting circuits are mostly old. (90% of the old circuits with #12 wire were reused.) The outlets were increased three for one.

IN 1907 the Chicago & Northwestern Railroad wired its then new office building in Chicago with Okonite cable. Recently the company modernized this building and the initial cable and its installation were so good that the original wire, after more than 35 years of service, was used again in all the circuits! An inspection of the original cable showed that the tinning on the conductors was very good, with no bare copper visible; the Okonite insulation was in excellent condition; the wire insulation was flexible and could be bent upon itself without cracking or injury and that the braids over the conductors, as well as the outside braid, were strong and well saturated.

The Chicago & Northwestern Railroad, in selecting a *good* wire 35 years ago, is now benefiting by using it again at a time when it also makes a valuable contribution to our country's war effort in the conservation of critical materials. Good wiring — Okonite wiring — pays! And in this instance it paid twice! . . . The Okonite Company, Passaic, New Jersey. Offices in principal cities.



Un-retouched cut-back section of #12 twin conductor Okonite wire removed from the Chicago & Northwestern office building after 35 years' use. Note its excellent condition.

OKONITE

INSULATED OKONITE WIRES & CABLES

3318

The Week at a Glance

WHY HAVE HEARINGS? At great expenditure of the time of highly competent men in preparing and presenting evidence, railroad wage controversies are painstakingly examined by "emergency boards," the membership of which is in President Roosevelt's own control. After long weeks of testimony, the boards bring in their reports—which certainly cannot be prejudiced in employers' favor. Does Mr. Roosevelt then support the findings of his own board? No. indeed; unless these are wholly satisfactory to the unions involved, he urges that negotiations be renewed on questions already, supposedly, resolved by judicial process. Such has been the behavior of the President of the United States on three occasions in the past eighteen months, as the leading editorial herein points out; and on which further facts are presented in a short article in our feature pages.

●

EFFORT WASTED: If the President is so much better informed, off-hand, as to what constitutes fair wages and working conditions in the railroad industry—than his tribunals are after weeks of inquiry and deliberation—why does he not just dictate, in the first place, what wages and working standards are to be, instead of all this waste motion at hearings by men who could easily find useful employment at other tasks?

●

PROFITING FROM THE WAR: Nobody, so the political orators proclaim, shall "profit" by the war. There are to be no profits, that is, except political profits these same politicians are garnering to themselves, and which they are collecting regardless of the effect on the wartime and post-war well-being of the country.

●

CAHOOTS WITH TRUCKS?: Charges that railroads conspired with truck lines in Official Territory to raise truck rates in that area to the rail level were made this week by Justice Department spokesmen, at the hearing on the Wheeler Bill to exempt rate conferences from the price-fixing prohibitions of the anti-trust law. The Attorney General's representatives have a view of what constitutes propriety in rate-making which seems to be shared by few of the government officials most intimately acquainted with the problem and its complexities.

●

STRIKES CAN'T BE LOST: And that is why we have so many of them—and constant threats of many more, which are dissipated only by buying off the threateners at their own price. It is truly said, as an editorial herein points out, that "you can't dig coal with bayonets." But the function of force in an orderly society is *not* to compel men to work against their will—but to protect men who *want to work* against lawless manhandling by those who would forbid them this right. If persons and property were given the safeguards against violence to which traditional American principles entitle them, strikes would occasionally be lost; and, when that can happen, men will not walk out unless their grievances are sufficiently real to warrant some risk. It is not John Lewis who deserves anathema, but rather the politicians who have in recent years so changed the law and its administration that the methods Lewis and his cohorts follow are always profitable and never the contrary.

●

LIGHT VS. ACCIDENTS: Why do accidents rise and fall with traffic, but in much larger proportion? For one reason, with falling traffic, there are few new situations and new men; most work done is wholly familiar to those who do it. A great need is that, especially with operations departing more and more from routine, employees *see* at all times what they are doing. An editorial herein cites instances from manufacturing plants in which accidents were reduced by more than half when improved and adequate lighting was provided.

●

BOILER FAILURES: When boiler failures occur from low water, the cause is usually the desire of the engine crew to avoid delay—and the insufficient margin of time which is left to them to correct conditions, once water is lost sight of in the glass. An editorial herein suggests that intensive and repetitive instruction in the conditions surrounding boiler failure would give employees the information they need to have always in mind when conditions arise which demand the rapid application of precautionary measures.

●

HOW ARMY MOVES TRAFFIC: The first authoritative and detailed account of the organization of Army transportation work which has been made public since war began appears in a paper, published herein, by Major General Gross, head of the Transportation Corps. How movement to ports is controlled—the work of the "regulating stations"—is described, and a special tribute is paid to the high efficiency of the railroads' centralized organization, provided by voluntary action of the carriers. Much interesting information is afforded on the operation of ports of embarkation, especially the large one at New York.

●

AIR FREIGHT: At the hearings on the operating unions' wage increase case this week, Counsel Flynn for the unions belittled the prospects for post-war competition with the railroads by air carriers, citing the views on this question of President Patterson of United Air Lines, which were published in *Railway Age* last winter. The railroads' counsel, Vice-president Aronson of the New York Central, countered that optimistic view by referring to Mr. Patterson's remarks as a "lullaby to the railroads." It is reported in the news pages herein that the Keeshin people have applied to the Civil Aeronautics Board for authority to engage in cargo freight operations on a large scale.

WHEN WAR GOES WEST: There will be a large increase in military activity in the Pacific before our Nipponese foes are brought to book—and this will mean a proportionately heavier burden on the already overtaxed railroads leading to the West. Such was the warning of Colonel E. C. R. Lasher of the Transportation Corps in a speech to the Mo.-Kan. Shippers' Board, reported herein. The I. C. C.'s Bureau of Transport Economics and Statistics has again made known its concern for the adequacy of railroad plant to handle the growing traffic burden. Such misgivings are widely shared by persons who know transportation conditions most intimately; but nothing shakes the complacency of the uninformed officialdom which persists in restricting the carriers' allotments of essential materials.

●

EMPLOYEE MAGAZINES: Periodicals which the railroads circulate among their employees are one of the primary sources by which employee understanding and contribution of his full share in the fighting of the war is being aroused, and largely attained. The quality of these magazines, on the average—as the observant have noted—has been improving rapidly, and a survey article herein gives specific information on the nature of this improvement. Informed employees are a necessary ingredient of successful railway operation at any time—but especially so at such a time as this.

●

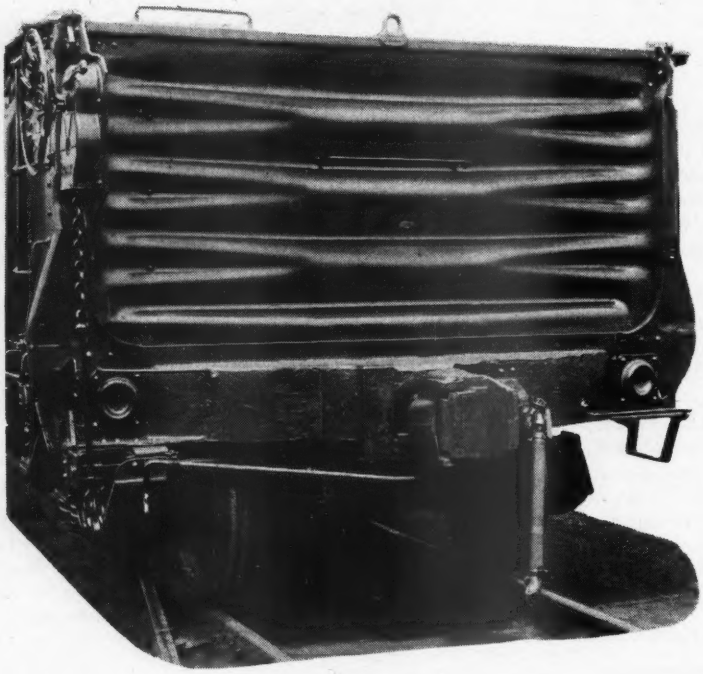
OP WAGE CASE BEGUN: The hearings on the operating unions' demand for a wage increase of 30 per cent or $3 per "day," whichever is greater were begun in New York this week. J. Aronson opened the case for the carriers and Bronx County's Democratic Boss Ed. Flynn for the unions. Mr. Aronson pointed out to the board what he conceived to be the errors of the tribunal which granted an increase of 8 cents per hour to non-operating employees. He found particularly unjustifiable the earlier board's tender feelings toward "time and a half after 40 hours"—since the 40-hour-week was not applied to the railroads at the special behest of the unions. He urged the board to distinguish between the effect of a wage increase applied to employees who work by the hour and those paid on a "dual basis." He believes the non-op board went quite a way in certifying that the wage increases will not affect rates, when the recent rate reduction won in the I. C. C. only by a 6-to-5 vote, before wages were increased.

●

A SUCCESSFUL ENGINEMAN: What are the marks of a good engineman? Among other qualifications, he is a man who "brings in a well-lubricated and easy-riding locomotive without severe pounds and he gets these results by running at high speeds with a slightly longer cut-off and lighter throttle." Such is among the many interesting and apposite observations in a paper herein by Fuel Economy Supervisor Dickson of the Alton.

Dreadnaught
DROP END GATE

DESIGNED TO PROVIDE MAXIMUM STRENGTH



GIVES SATISFACTORY SERVICE FOR PRESENT HIGH SPEEDS AND HEAVY LOADS.

ABSORBS SHIFTING LOAD SHOCKS.

WILL STAND ABUSE IN LOWERED POSITION.

STANDARD RAILWAY EQUIPMENT MFG. COMPANY

HAMMOND, INDIANA

WORKS: HAMMOND, INDIANA — NEW KENSINGTON, PA.

CHICAGO OFFICE — 310 S. MICHIGAN AVE.

The Week at a Glance

WORSE THAN '32: After the 1917-18 war the railroads were one of the principal contributors to peace-time employment and prosperity—because of their expenditures for rehabilitation and improvement of their properties. They were able to make these nationally-helpful outlays because investors had sufficient confidence in the carriers' future to advance funds for the purpose. The eagerness, or lack of it, of investors to entrust their funds to the railroads is reflected in the prices of railway securities—which, by their fluctuations, reveal whether or not investors are competing with each other to obtain railway securities. On June 12 this year, the Dow-Jones average price of railway stocks was about $35 per share, with 1942 earnings at $10 per share. In 1918-19, under government operation, the price average fluctuated between $74 and $93—more than twice what it is now. The present price is lower than that of the bottom of the depression in 1932, when the average earnings of stock were less than zero.

●

EMPLOYMENT AND CREDIT: The leading editorial herein concludes from these figures that substantial railroad earnings, alone, are insufficient to reestablish the confidence of investors—without which the contribution of the carriers to post-war employment can be very little. What is needed is, not only that reasonable earnings be permitted, but that a reasonable disbursement of them be made to security-owners—which is not now occurring. Inflationary wage increases to the unions are winked at, and even abetted, despite their discord with alleged administration policy, while little-inflationary or non-inflationary dividend increases are regarded with deepest official disfavor. Yet, by what other means can the government expect a private industry to contribute its share to national post-war employment? Or does the government really desire that post-war employment be provided by private enterprise and initiative?

●

ENGINE REPAIR ECONOMY: Repair facilities must parallel the new power they handle—or the economies the engines yield may be largely dissipated in costly makeshift arrangements to maintain them. Modern shop improvements—to do the work necessary on larger power—have been provided by the C. & N. W. and are described herein. Parts on heavier engines are now removed and applied by machinery and other arrangements especially adapted to the task, at large savings in manpower, in unremumerative repair time and in expense.

●

QUICK FACTS RE MATERIALS: The Southern has developed a system for meeting, with minimum confusion and delay, its compliance with government-made complexities in securing scarce materials. In essence, the system comprises a method of keeping stock records which holds the managerial finger constantly on the multitude of pulses which constitute the road's material situation—records from which it is possible quickly to derive information which may be needed to convince the authorities of the urgency of the requirements. How the Southern is doing this job is reported in an article in these pages.

●

QUENCHING OIL FIRES: With the large tonnage of petroleum products now moving by rail, the matter of providing fire protection to parallel the heightened hazard is a proper and pressing managerial concern. The first step, of course, is to correct equipment and roadway conditions which invite derailments—but fire-fighting devices and methods are also an essential part of a complete protective picture. In this latter area the C. & E. I. has conducted some significant experiments, with results revealed elsewhere herein.

●

GOVT. LADING BILL: A simplified government bill of lading, combined with a freight waybill, has been approved by the Comptroller General, as is related in an article elsewhere herein. The new form of record assures the provision of essential information and affords greater reliability of its accuracy, besides reducing the quantity of paper work.

●

WHEAT TROUBLES: A large part of the impending wheat harvest is going to have to be stored locally on the ground because the governmental authorities have not permitted the railroads to equip themselves adequately to move it promptly. A survey of the unsatisfactory situation from the standpoint of one of the largest grain carriers, the Santa Fe, is given in the news pages of this issue.

●

OPS' HOURLY EARNINGS: Witnesses for the operating unions, in presenting their wage increase case to the "emergency board" at New York—as reported elsewhere in these pages—revealed great reluctance to say anything about actual hourly earnings of these employees. They do their talking in terms of the "basic day," which is not a real day, and is "basic" only by agreement. Their backwardness with such data is understandable, because, if the general public had any conception of the actual earnings of most of these employees for eight hours' work, their demand for more money would have little popular support. They are not basing their demand for more money on a comparison of actual hourly earnings of mileage-paid employees with the hourly earnings of other industrial employees; because such a comparison would argue for a decrease in railway wages rather than an increase. Rather, they insist, the *percentage increase* of the highest-paid railroad employees must correspond with that paid by the most lavish industrial war-baby, operating without concern to costs on what amounts to a cost-plus basis, to temporary employees, most of whom will be fired when the war ends.

MONEY FOR PLANNERS: The National Resources Planning Board—which has sought to revise the Constitution by substituting its own "Bill of Rights" in place of the one embedded in the fundamental law—will get $50,000 with which to wind up by August 31 its gaudy and wordy program for "rebuilding America," with bureaucrats playing Lady Bountiful at the taxpayers' expense. Such is the recommendation of the Senate and House conferees, reported in the news pages.

●

PROMOTES INFLATION: The "emergency board" recommendation that 8 cents more per hour be paid by the railroads to their non-operating employees "does violence to the stabilization program and, if suffered to become effective, will irretrievably break the inflation line." Such is the contention of the railroads' brief, asking Stabilization Director Vinson to set aside the board's report. Unless he does so by June 23, the railroads have no alternative but to make the increase effective (i. e., for so long as the Stabilization Act requires, because, except for this Act, "emergency board" decisions are not binding). It will, consequently, soon be known whether the "hold the line" program is an actual government policy or merely another characteristic verbal gust, uttered with no conviction or determination.

●

"NEW" DEAL REALLY OLD: One hundred years ago in England, an argument occurred which closely parallels that now going on between New Dealers and supporters of free enterprise. The poet-laureate, Southey, was the century-ago New Dealer, while the historian Macaulay entered the lists for economic and political freedom. We quote from Macaulay in an editorial herein, and readers will recognize that his words and his logic apply with the same force to present conditions as they did to those of his own time. The New Dealers lost the contest a hundred years ago; free enterprise was unshackled; and the democratic world entered upon the greatest period of increase in well-being that it ever experienced.

●

STRAWS IN THE WIND: In the news pages herein two significant developments in the area of technological research for the benefit of the railway industry are reported. The Locomotive Institute has named a research director—Lawford Fry of Edgewater Steel who was for many years associated with Baldwin. Another report in our news pages reveals the extensive technological studies being carried on by the Waugh Equipment Company. The realization is rapidly spreading that, with so many government millions and even billions being expended for the technological improvement of other means of transportation, commensurate intensity of effort in the same direction must be put forth in the railroad branch of transportation if it is to maintain or improve its relative position.

HOW YESTERDAY'S CABLE RESEARCH HELPS WIN TODAY'S WAR

This advertisement on the
Conservation of Tin
could have been written 15 years ago!

In making rubber-insulated wires, all copper must be coated to prevent chemical reactions between the copper conductor and the rubber insulation. Until 1928, tin was the best known separator.

Then Okonite research men developed a lead alloy to replace the usual pure tin coating for the conductor in rubber-insulated wires and cables. This alloy is known as Okoloy. It outlasts "tinning" at least two to one. Today, the use of Okoloy also results in large savings of vital tin.

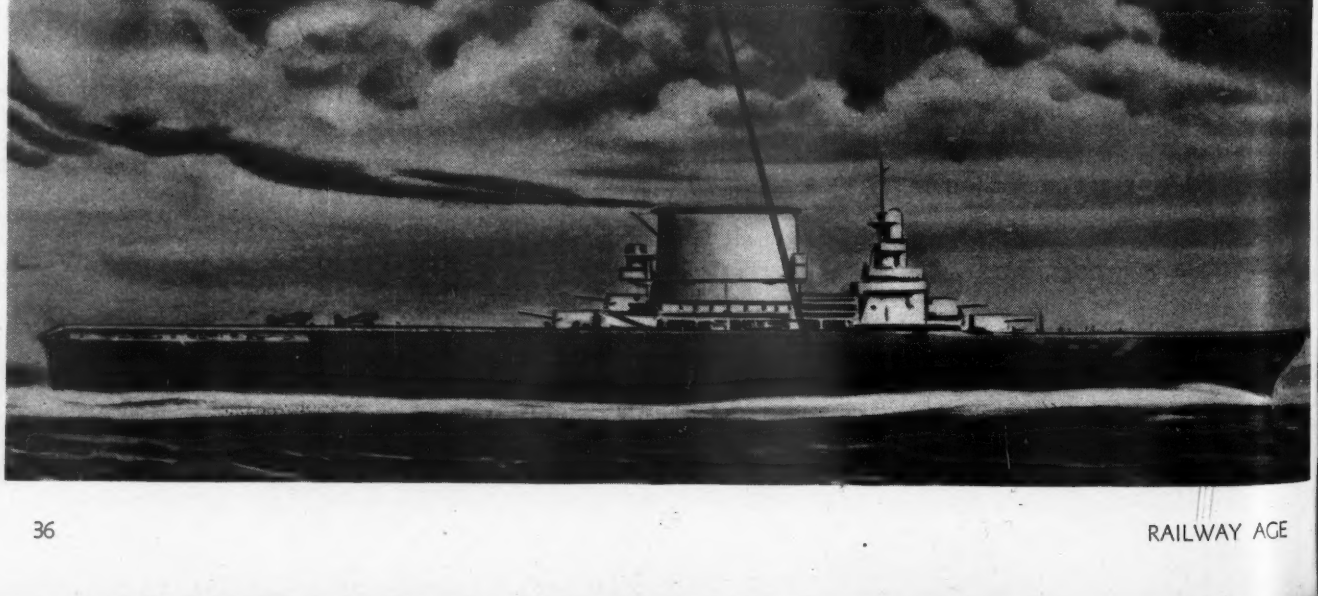
Our tin supply is so critical that it is necessary to return an empty tooth-paste or shaving-cream tube when purchasing a new one. The accumulation of even such small tin savings will help build aircraft carriers and other implements of war.

This is but one example of how Okonite's continuous research frequently helps solve national economic problems that were not anticipated when the research work was conducted. And this continuing research is finding new insulations and new cables that are today being devoted solely to the winning of the war but later will be of immense value to American Industry. » » » The Okonite Company, Passaic, N. J. Offices in Principal Cities.

OKONITE

Insulated Wires and Cables

3268



The Week at a Glance

RATE-MAKING PRACTICES: Judge Fletcher was the principal witness at this week's hearings of the Wheeler committee which is considering legislation to authorize and regulate rate-making by the "bureau" method—a practice found so objectionable by the young men in the Justice Department's anti-trust division. Mr. Fletcher indicated by his analysis of the contentions of these zealous prosecutors that they know very little indeed about the conditions with which rate-makers must contend; and that they also fail to comprehend the simple and elementary distinction between principles applicable to regulated industry and that which prices its product as it sees fit, and as market conditions permit. Shippers who testified showed few of the wounds they allegedly suffer from present rate-making practices.

●

WHO AGREES WITH ARNOLD? Judge Fletcher went on to say that, in their support of present rate-making technique, the railroads are in distinguished company—namely that of Congress, the I. C. C., the courts, and economic authorities. Opposition to these practices resides, it seems, almost uniquely in the anti-trust division of the Attorney General's department, among the bright young lawyers who do not labor under the disadvantage of practical experience in the field to which they bring the novice's assertiveness and self-assurance. Everybody is out of step but Thurman and his fledglings. Judge Fletcher admitted Arnold's charge that the railroads are opposing the St. Lawrence Seaway—here again finding themselves in the numerous company of "probably nine-tenths of the people of the United States."

●

GEN. GROSS IS WORRIED: No man in the nation's military establishment is in a better position than Major General Gross to know both the needs of the war program and also the facilities and materials the railroads must have in order not to falter in contributing their share to that program. And General Gross is concerned at what the lack of materials and equipment is doing, and threatens to do, to railroad service. He revealed his misgivings as to the trend of events in a statement to a Congressional committee, reported in an article herein. He foresees much heavier demands on carriers serving the Pacific Coast and one road, apparently in that area, he said is "stumbling" even under its present load—primarily because of insufficient locomotives. Government operation of the railroads, in the General's opinion, would be a "disaster."

●

NON-OP RAISE HALTED: The pay increase of 8 cents per hour, recommended by the "emergency board" for non-operating employees, would have gone into effect on June 23 unless set aside on or before that date by Stabilization Director Vinson—and, acting at the last possible moment, Mr. Vinson did set the recommendations aside. He did not give his reasons, nor has he yet revealed whether he overruled the board because he believed it too generous or not generous enough. It is Mr. Vinson's job to thwart inflation and, of course, he cannot perform this function by authorizing blanket increases in wages. But Mr. Vinson is under the further necessity of pleasing the White House—and whether he can do that and still accomplish the task assigned to him remains to be seen. The White House, it will be remembered, was not only not shocked by the 8-cents-per-hour raise the emergency board favored, but went it one better by suggesting that the non-ops ought to get time-and-a-half after 40 hours; which the unions had not even asked for.

●

N. Y. CENTRAL POWER: Twenty-five 4-8-2's have been delivered to the New York Central in recent months, and are proving of great help in handling the heavy current traffic. They are described in an illustrated article herein.

●

BLACKOUT TIME LOSS: "Absenteeism," strikes, slow-downs and other work-stopping practices are properly denounced by political exhorters in behalf of the war production program. On this Wednesday night in the City of Philadelphia where the *Railway Age* is being printed there has been a one-hour test blackout and practically a complete shut-down of production in this important industrial area. One week ago it was the same thing. The frequency and duration of these tests apparently vary from community to community according to the whim of local authorities, who have no responsibility for and, it may be, little concern for maintaining industrial production. It would be informative to see a compilation of industrial man-hours lost by unnecessarily frequent and prolonged test blackouts, compared to other sources of labor wastage which are so bitterly decried by the professional public admonishers on wartime behavior.

●

TEST FOR ANTI-SOCIALISM: "One-Fifth of a Nation Government-Owned"—such is the title of an article in the magazine "Business Week," in which it surveys the post-war dangers to the manufacturing industry of so much plant in government ownership. These factories may be continued in socialistic operation after the war or may be sold at bargain prices. In either event, plants wholly financed by private capital will have a tough time competing with facilities provided largely or wholly by taxation. As an editorial herein reveals, we commiserate deeply with these afflicted manufacturers—and would rend our garments even more, if more of them who object so forcefully to this particular government competition were equally indignant at the competition of government funds in transportation. Such, however, is often not the case—many manufacturers, right in the act of denouncing the competition of the government with them, are just as busy trying to *extend government competition against the railroads* (by post-war superhighways, for example).

STATION SPEEDS TRAINS: The Seaboard has a new passenger station at Raleigh which has expedited the movement of trains 15 minutes each, on the average, and has eliminated delays to freight trains formerly occasioned by passenger trains' obstructing of running tracks. The new facility, which also has traffic-attracting features, is described in an illustrated article herein—which relates in detail the operating disadvantages the new structure has eliminated.

●

HARRIMAN AWARD: The Chesapeake & Ohio is the winner of the Harriman gold medal for safety performance in 1942. The Bessemer & Lake Erie is the medalist in the silver class of locomotive-miles, and the Lake Superior & Ishpeming is the winner in the bronze group.

●

WAGE DEMAND UNDERSTATED: The operating unions' demand for wage increases are stated at $3 per "day"—which gives an entirely erroneous opinion to most people who do not realize that "day," as the word is used in train service, does not have its customary meaning. Instead it usually means 100 miles run—and it is a rare train crew which can't get in at least one-and-a-half or two of such *payroll "days"* in an *actual day* of eight hours. What these unions are out after is not $3 more per day—but from $6 to $9 more.

●

$4200 A YEAR NOT ENOUGH: Members of the learned professions—doctors, engineers, clergymen—would probably be interested in some of the testimony being put in by the operating unions in their demand for wage increases, as reported elsewhere in these pages. Some of the witnesses admit that they are now being paid between $300 and $400 per month, and many work less frequently than every other day—and yet they consider their wages inadequate. Such earnings are not just a wartime windfall either—as are the comparative wages they cite in munitions plants. Instead, they are not a whole lot more than "old-timers" who can hold on to their jobs will draw, year in and year out, even in times of depression.

●

EXIT RESOURCES BOARD?: The National Resources Planning Board—that curious congeries of schoolmasters, social reformists and landscape gardeners which sought to replace the Bill of Rights with a model of its own and which plotted to "rebuild America" into a bureaucrats' Utopia, predominantly socialistic—is a thing of the past, unless some trick can be contrived to circumvent Congress. The legislators have appropriated $50,000 for the board with which to liquidate its affairs, and have directed that it be not supplied with additional funds from any other source. To prevent the board from carrying on its contriving by the ruse of a change in name, Congress has directed that its records and files be turned over to the National Archives and that no other agency undertake the functions attempted by the board without specific authority.

DREADNAUGHT ENDS

PROVIDE

STRENGTH–

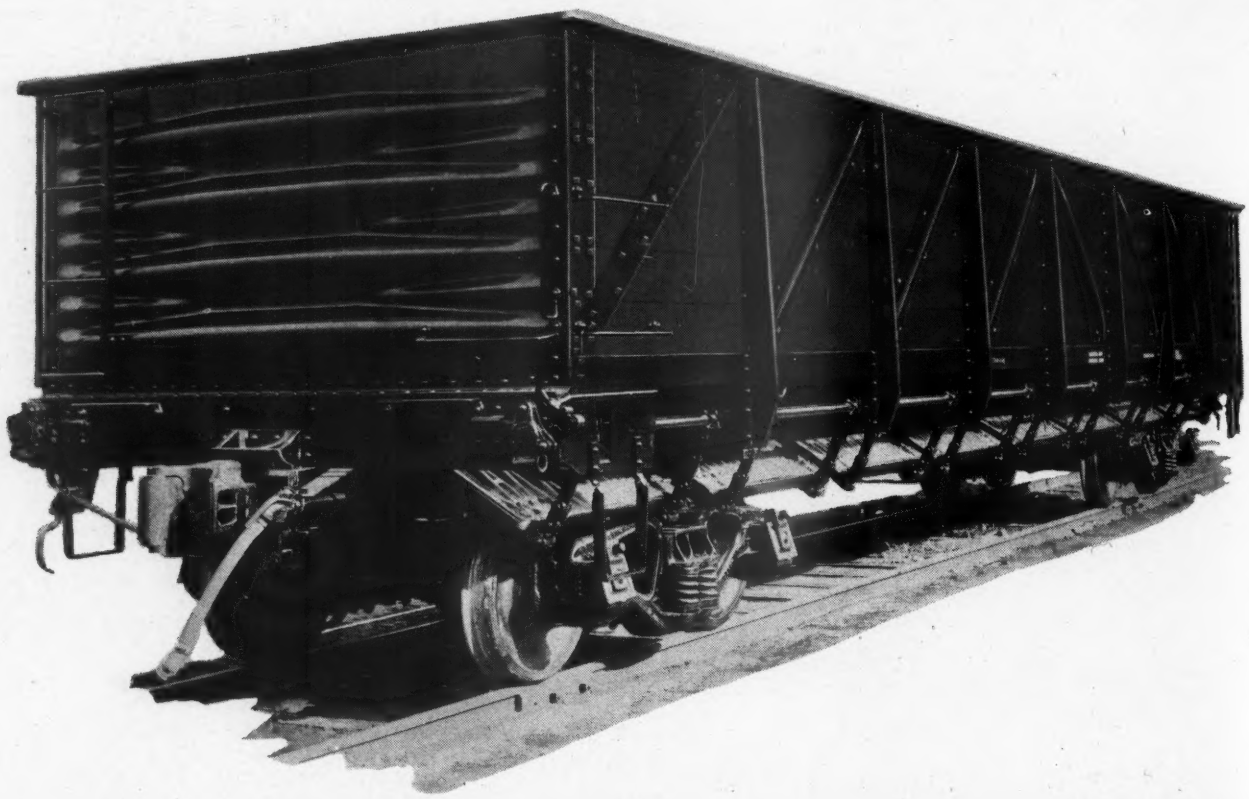
UNIFORM OVER ENTIRE SURFACE.

RUGGEDNESS

A MUST, WITH INCREASED LOADS AND SPEEDS.

RESILIENCY

TO CUSHION SHIFTING LOAD SHOCKS AND PROTECT CAR SUPERSTRUCTURE.



STANDARD RAILWAY EQUIPMENT MFG. COMPANY

HAMMOND, INDIANA

WORKS: HAMMOND, INDIANA NEW KENSINGTON, PA.

CHICAGO OFFICE – 310 S. MICHIGAN AVE.

How To Cut Replacement Costs

and Send More Steel to War

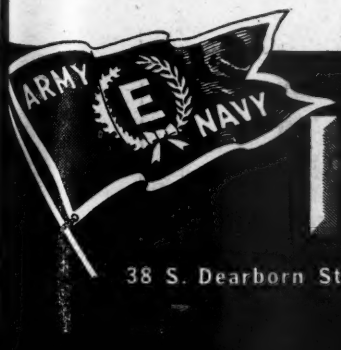
Regular inspections, adequate painting, and frequent lubrication, will cut replacement costs and save steel that is vitally needed in every quarter of the globe by America and her Allies.

Initiate, today, a special wartime inspection service. Examine roofs, siding, and structural members of buildings—especially where atmospheric conditions, or process fumes, result in destructive corrosion. Clean and paint steel that shows signs of deterioration. Consult a reliable paint manufacturer if standard paints do not prove satisfactory.

Many types of manufacturing equipment—trucks, cranes, and the like—operate in and out of doors. Such equipment should not only be painted, but moving parts should be adequately lubricated to save the steel that otherwise would be needed for replacement of parts.

The moving parts of all types of machinery should be regularly inspected to make certain that operators are applying lubricating oils and greases of the correct qualities, and in the right quantities. If undue wear of moving parts continues, ask a lubricant manufacturer for advice.

Take better care of the steel now serving you. Less steel used for replacement means more steel for the fighting fronts.



INLAND STEEL CO.

38 S. Dearborn Street, Chicago • Sales Offices: Milwaukee, Detroit, St. Paul, St. Louis, Kansas City

FOR *Distinguished Service*

WORKER "E's" BRING WARRIOR "V's"

Awarding of the Army-Navy E to the men and women of Gustin-Bacon Manufacturing Company affords us the opportunity to explain why the railway industry has not had all of the G-B products it so sorely needs.

From what it has been called upon to deliver, the railway industry well knows that war needs come first. Ninety percent of G-B production is for the Navy, the Army, and the Maritime Commission. Our facilities have been augmented by the building of a new Fiberglas insulation factory.

From our ranks we lost many to the world's finest army of warriors which, with ample equipment now in hand, pushes relentlessly on to victories all around the globe.

All the rest of us are serving in America's army of workers which has performed miracles in the production of the world's finest fighting equipment. That service has now merited the Army-Navy E award for excellence. In this we take deep pride. The distinction is hard won, not lightly bestowed and shall not be lightly regarded. Our army of workers will strive even harder to win more "E's" (•) in order that our army of warriors may continue to win more "V's (•••—) to speedily end global war.

To the railway industry, we pledge that when the last gun is fired, the war sharpened skill of G-B engineers and craftsmen will swing back to 100% production of improved G-B products to serve your needs better than ever before. In the meantime, it is our hope that more and more of our production can go toward meeting your needs.

GUSTIN-BACON MFG. CO.
KANSAS CITY, MO.

G·B MFG. CO.

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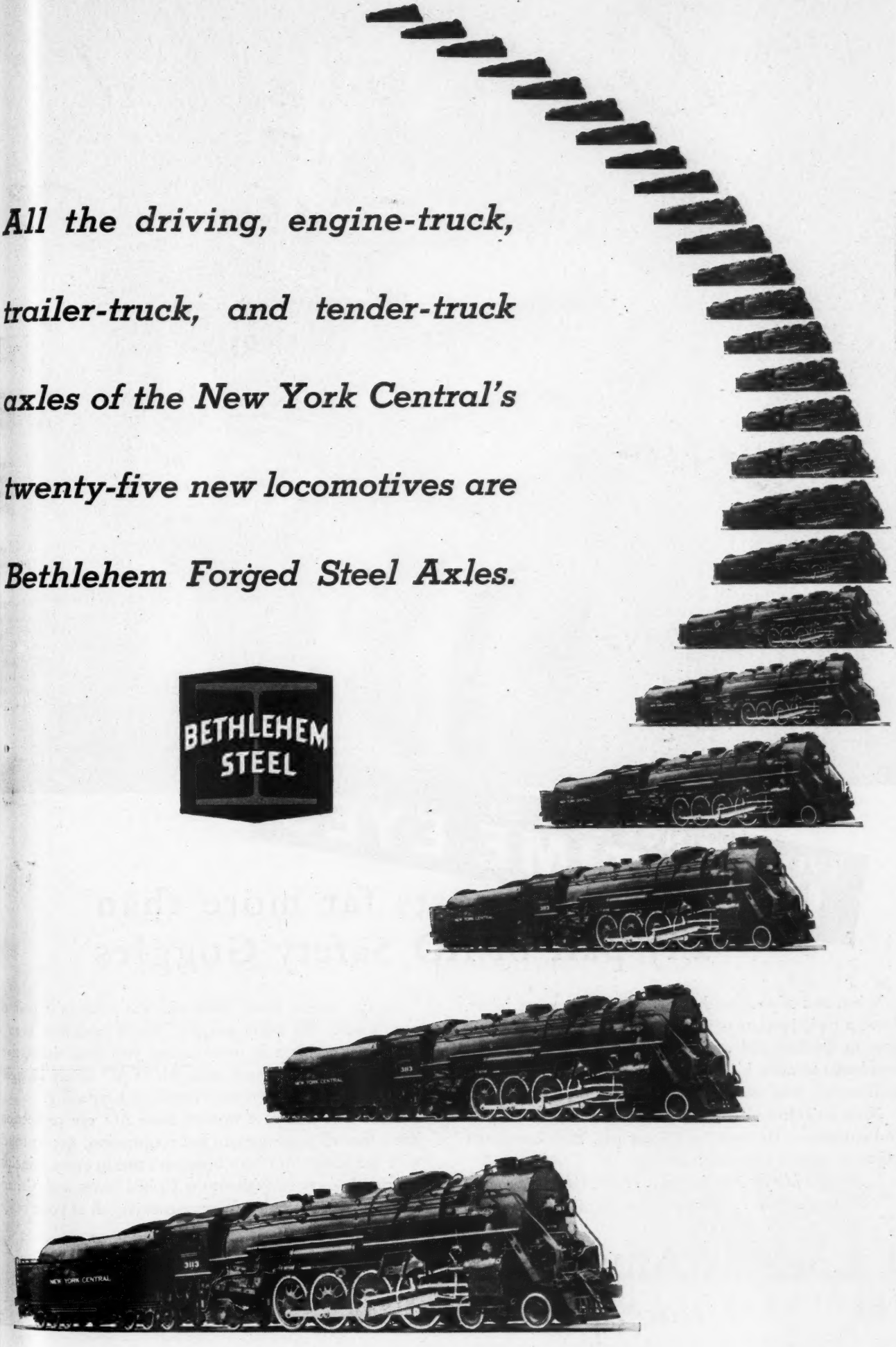
San Francisco

All the driving, engine-truck, trailer-truck, and tender-truck axles of the New York Central's twenty-five new locomotives are Bethlehem Forged Steel Axles.

BETHLEHEM STEEL



EVEN A MINOR CASE OF LOST-TIME EYES costs far more than any pair of AO Safety Goggles

When one of your workmen suffers a minor eye injury, here's a typical picture of what happens: He stops work and goes to the First-Aid station for treatment. Usually he is sent home to nurse his injury. Next day he returns to work and has two brief treatments at the First-Aid room.

Now, let's estimate costs. First, the workman suffers pain and annoyance. He loses 3 or 4 hours' pay. Your company's expenses include items such as these:

Machine idle for 3 or 4 hours . . . First Aid . . . Treatment Medical Supplies . . . Foreman's time on case . . .

Now, compare these costs with the price of a pair of comfortable AO safety goggles. You'll find that even a *minor* eye accident is now costing you two, three, five, maybe *ten* times as much as a pair of AO Safety Goggles designed to prevent eye accidents from happening.

Make sure that your workers have AO eye protection. For information, advice and full cooperation, get in touch with the nearest AO branch—there's one in every principal industrial center throughout the United States and Canada —or have an AO representative call at your office.

American Optical COMPANY

SOUTHBRIDGE, MASSACHUSETTS

OVER OR UNDER—THE "IMPOSSIBLE" GETS DONE!

Those maintenance-of-way men who are now revamping our bridges and widening our tunnels for greater wartime speed and safety—all the time keeping freight and passenger trains rolling—have recently turned in some astonishing jobs. What's more, they have passed off all the skill, daring, and resourcefulness that these "impossible" jobs require as just railroad "routine."

Not long ago a bridge over the Mississippi River at Winona, Minnesota, needed strengthening to carry larger locomotives and other heavy war traffic. Bridge engineers replaced two light, long-span, through trusses with six shorter and stronger deckplate girders.

By slightly adjusting train schedules, and detouring one train a short distance over another road, they did the job in daily six-hour periods. During most of the work the passing trains had only one inch clearance on each side of the track.

A forty-year-old, double-track viaduct carrying the trains of two railroads at restricted speeds in New York was replaced by an earth embankment supported by a double reinforced, arch culvert. Only thirty-three days of single-track operation were required. All trains now cross that place faster.

A double-track, main-line tunnel at Pittsburgh needed strengthening. It extended through shale and sandstone formations, and was lined with brick and concrete. By routing all traffic over one track at a time, the whole tunnel was given a metal liner-plate roofing, to which Shotcrete was applied. No trains were annulled or seriously delayed during this operation.

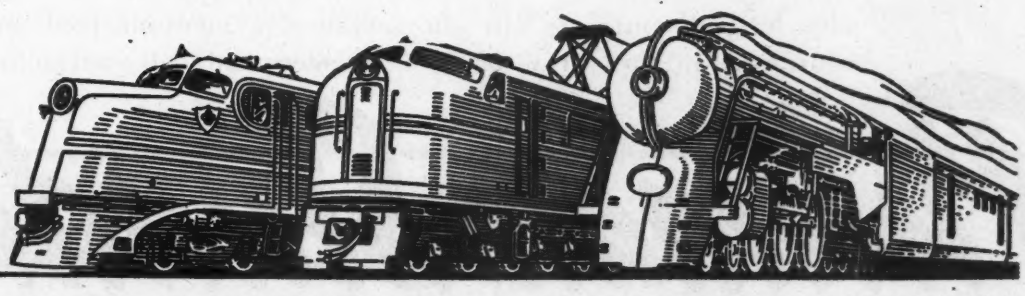
A double-track timber trestle near Springboro, Pennsylvania, was still serviceable, but was not up to the railroad's standard. It was a single-span trestle, only 12 feet, 6 inches long. But underneath was a quick run-off stream which fell 33 feet in 1100 feet.

To be sure of quick substitution, a new pre-cast concrete bridge was decided upon. It was made in sections weighing from 29 to 49 tons—and hauled thirty miles to Springboro. There, by directing all traffic to one track at a time, the new culvert replaced the old trestle without delaying war freight.

Big jobs and little jobs in railroad bridge, culvert, and tunnel building are being completed all over this country all the time. Though each job represents a new and difficult problem, each problem is solved in "routine."

It's a fortunate thing that our country has more than a million such "routine" railroaders to keep trains rolling.

—The Trackwalker

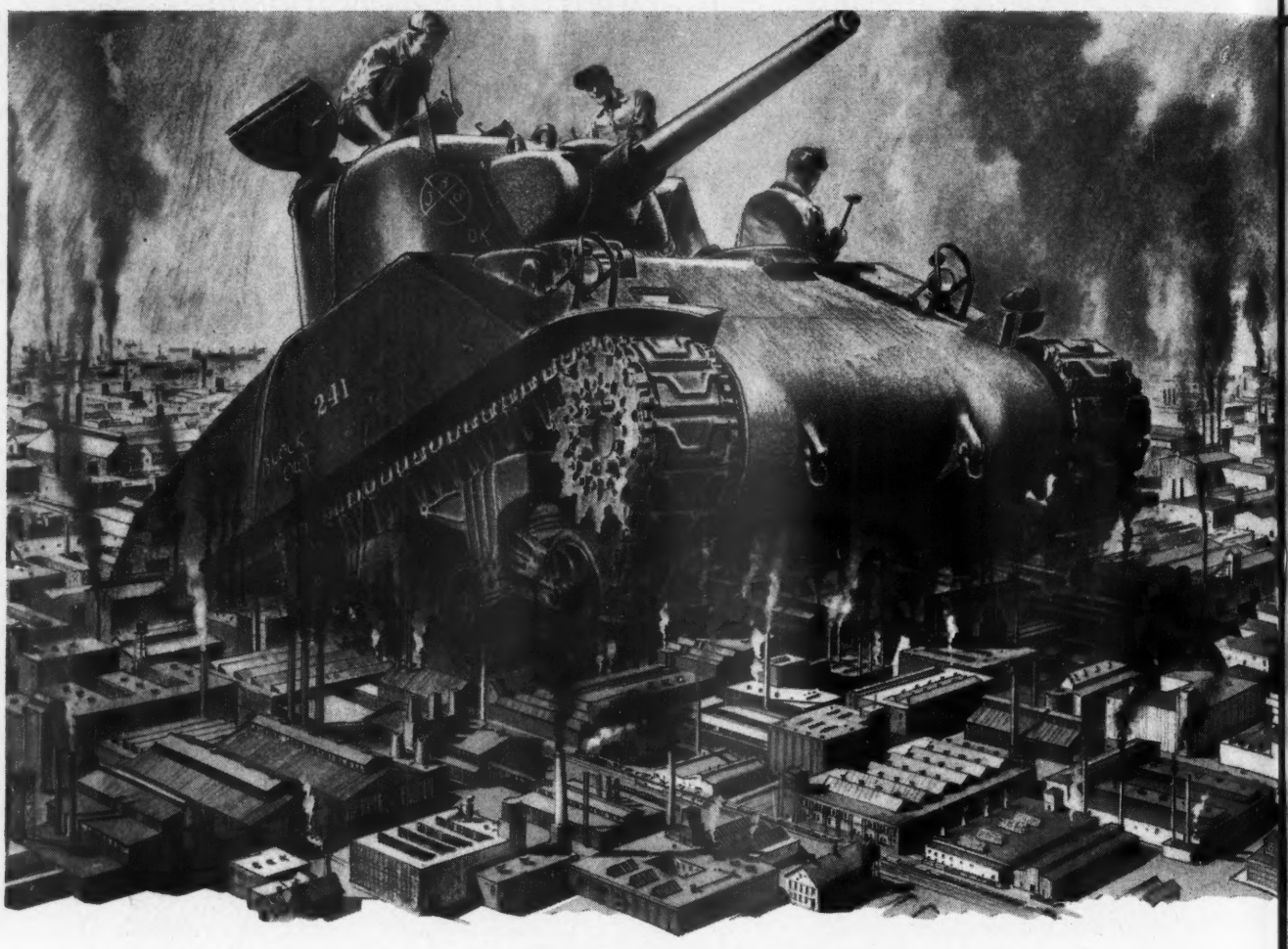


AMERICAN LOCOMOTIVE • GENERAL ELECTRIC

Copr., 1943, American Locomotive Company and General Electric Company

113-27-9500

THE TANK THAT CAMD



Here's a deadly example of what well-disciplined teamwork can achieve—a stirring proof that a sub-contracting relationship can be the basis of truly democratic co-operation

A total of 865 suppliers and sub-contractors contributed to the building of this tank. 407 were small manufacturers, 300 were medium-sized manufacturers, and only 158 would be considered large manufacturers. Many of Pullman-Standard's sub-contractors have also let sub-contracts. In one instance, a medium-sized sub-contractor in turn drew on 300 suppliers and sub-contractors.

Pullman-Standard

CHICAGO · NEW YORK · CLEVELAND · WASHINGTON, D. C. · PITTSBURGH · BALTIMORE

...BUT OF 865 PLANTS!

Tough, merciless sluggers—these husky, vicious devils! Built to take it—outside. Built to keep everlastingly going—inside. We know, for we build them here at Pullman-Standard—with the able co-operation of 865 suppliers and sub-contractors, large and small.

This smooth effectiveness is the result of industrial teamwork, of engineering—of patient planning and preparation. Even though Pullman-Standard's plants could have built practically the entire tank, yet was it clear that many manufacturers working together in a huge co-operative effort, utilizing investments already made, must surely build tanks and other essential war matériel a great deal faster than could any one plant alone.

★ ★ ★

Combing highway and byway, city and hamlet, Pullman-Standard sought capable, experienced team-mates for a vast share-the-work program; sought those essentials—plants with management, men and facilities; sought and found them. And this proves that the plan is good—it works!

Brains worked together, pooled experience to develop sound methods, to perfect tool designs, to synchronize production schedules. In many instances Pullman-Standard loaned supervision to get the job going smoothly. And of every dollar received by Pullman-Standard for a great fleet of 30-ton tanks, 80% is passed along to those suppliers and sub-contractors. Pullman-Standard itself—for coordination, painstaking engineering, exhaustive planning, manufacturing, assembly, rigid tests, and for assuming full responsibility for the tanks' unfailing performance—retains the remaining 20%, which in turn is distributed for labor, overhead, services and Federal taxes.

Participating in that tank program are 865 suppliers and sub-contractors in 206 cities in 25 states—from a one-man shop to a great industry employing 150,000 workers—operating under 5432 contracts from Pullman-Standard.

★ ★ ★

Nor is this the full story. Today, in addition to **TANKS,** Pullman-Standard has produced huge quantities of **HOWITZER CARRIAGES, TRENCH MORTARS, BOMBS, SHELLS** of various calibers and sizes, parts for **ANTI-AIRCRAFT GUN MOUNTS, AIRCRAFT MAJOR SUB-ASSEMBLIES, FREIGHT CARS** for the Army, Navy, and Railroads, and **NAVAL PATROL CRAFT.**

Pullman-Standard is itself a sub-contractor—chosen to provide great quantities of other matériel essential to the war program; chosen because of particular fitness, long experience, ample facilities, and ready-made "know-how."

Eager to give "all-out" aid to the nation's war effort, Pullman-Standard opened its doors to all who sought to learn from its experience. Many came and still come—and thousands of ordnance items are pouring forth faster in many plants, because alert manufacturers recognized methods for speeding production and adopted them.

★ ★ ★

Core and heart of this teamwork is Pullman-Standard's 84 years of varied and fruitful experience. Here, truly, are the supple minds eager to tackle knotty problems, the endless resourcefulness of American industry, the stirring capacity to "do it better" that is so characteristic of Democracy inspired to its ultimate best.

★ ★ ★

We long for peace—for a return to the kindly relationships of neighbors; to making things for pleasant, happy living. To those joyous tasks we shall bring countless new and better methods learned under the driving necessity of war! For creating new comforts and conveniences of which we have not dreamed! Stirring proof that Democracy alone can make a world fit to live in.

BUY U. S. WAR BONDS AND STAMPS

The Pullman-Standard plants at Butler, Pa. and Hammond, Ind. have both been awarded the Army and Navy "E" pennant for efficiency in production.

...CAR MANUFACTURING COMPANY

...MINGHAM · WORCESTER, MASS. · San Francisco Sales Representative, Latham McMullin

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KEEP 'EM ROLLING

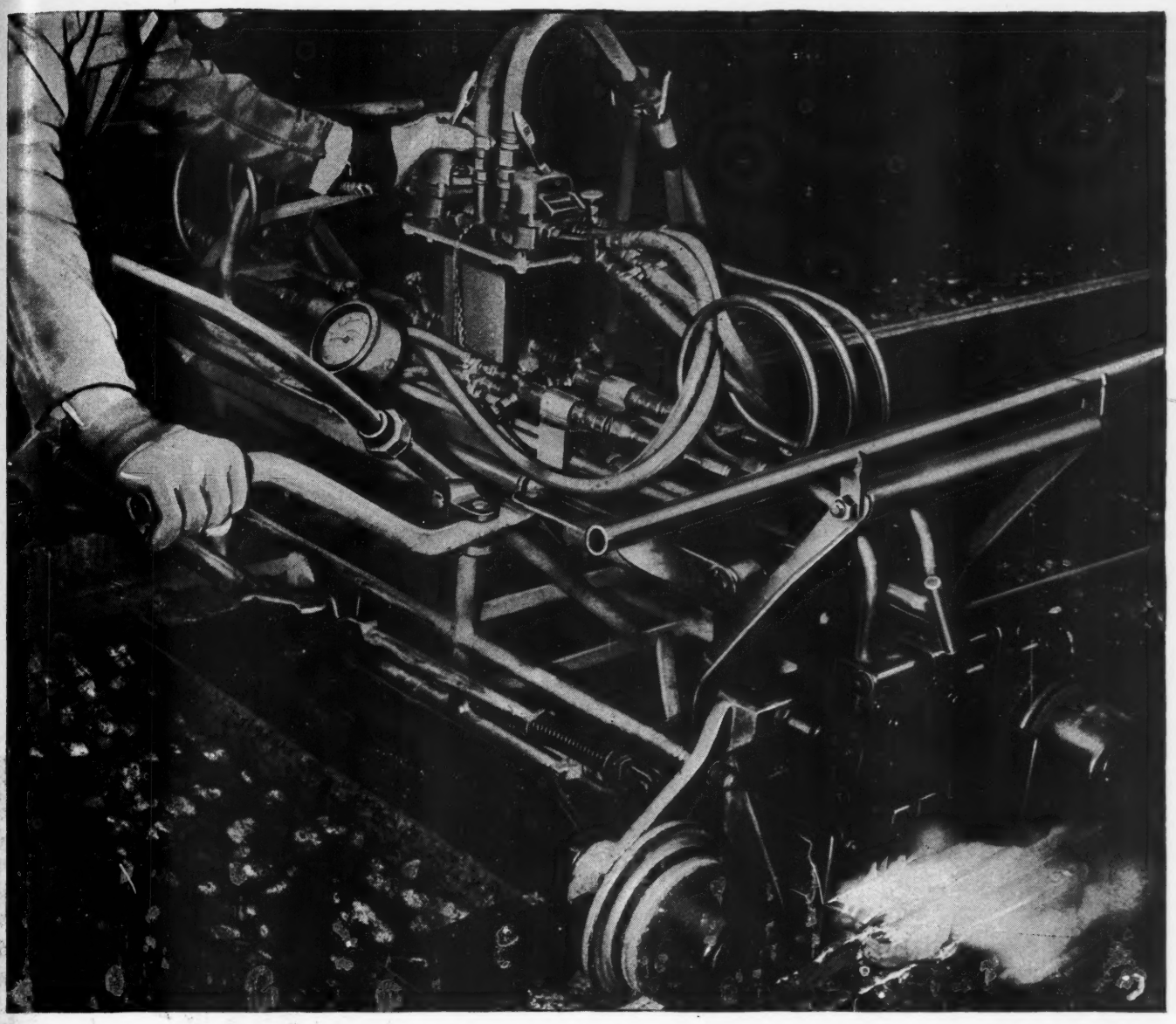
. . . NOW AS EVER AN INSTITUTION AT YOUR SERVICE

In war as in peace, you'll find your nearest Authorized Distributor of genuine Bendix-Westinghouse Air Brakes and Air Control Devices a most competent headquarters for your every control problem ★ Despite the many obvious burdens currently confronting these strategically located outposts, you'll find them, without exception, as dependable and quite possibly more resourceful than ever ★ They're geared to the times and dedicated to the policy of "Keep 'em Rolling" ★ For the duration, no one could be more capable or willing to assist you in rigid maintenance and reliable counsel in rehabilitation ★ You're invited to use this service freely ★ Thus we can assure you safe, smooth, economical Brake Control until Victory ushers in a new era of motor transportation which will, as ever, find genuine Bendix-Westinghouse Air Controls waiting and ready to accept newer, greater responsibilities.

BENDIX-WESTINGHOUSE AUTOMOTIVE AIR BRAKE COMPANY
ELYRIA, OHIO

BENDIX-WESTINGHOUSE AIR BRAKES

AN ORGANIZATION WHOSE UNDIVIDED EFFORT AND COMPLETE RESOURCES ARE DEVOTED TO YOUR CONVENIENCE AND SAFETY



Oxy-Acetylene End-Hardening Conserves Critical Materials

● Rail-end hardening conserves rail by retarding batter. This flame treatment lengthens the life of rail in first position and materially reduces wear on joint bars and bolts – hence there are fewer replacements over the years and less need for the use of critical materials in building up battered and worn rail ends.

By specifying Oxweld end-hardening as a part of new rail-laying programs, railroads can save valuable materials and man hours.

THE OXWELD RAILROAD SERVICE COMPANY
Unit of Union Carbide and Carbon Corporation
UCC
Carbide and Carbon Building Chicago and New York

SINCE 1912—THE COMPLETE OXY-ACETYLENE SERVICE FOR AMERICAN RAILROADS

The word "Oxweld" is a registered trade-mark.

Chilled Tread Wheels
Bolster Diaphragms
Hopper Doors
Hopper Sheets, floor and sides
Center Sills
Spring Planks
Brake Forgings
Draft Gear Forgings
Equalizers
Center Plates
Journal Box Wedges
Railway Mail Car Fittings

Of the nearly 2,000,000 freight cars now on railway lines in this country, about 98% are in serviceable condition — one of the best records ever reported. But now is the time to bring "bad order" cars to the irreducible minimum!

In the past twelve months the railroads have reduced "bad order" cars from the very low figure of about 60,000, to the even lower figure of about 45,000. This excellent record has been set by the railroads' car repair departments in the face of many difficulties.

With the present small number of cars out of service for repairs, it is no longer feasible to accumulate cars in series so that systematized programs of heavy repairs can be carried out. Today, the shop must take in cars of all types, and in every condition. This is not economical — either in manpower, or in inventory of repair parts and materials.

We believe there will be general agreement that these difficulties promise to increase, rather than diminish, in the near future. In the meantime, a.c.f. offers its every facility as a major source of supply of freight car repair parts, to the end that every car that can be made to turn a wheel may be kept in the service of our nation!

a.c.f.

AMERICAN CAR AND FOUNDRY COMPANY

NEW YORK • CHICAGO • ST. LOUIS • CLEVELAND • PHILADELPHIA • PITTSBURGH • ST. PAUL • SAN FRANCISCO

Why Railroad Men Specify

HASKELITE

Plymetl

1. This tough, strong metal-faced plywood requires no welding in the face of partitions . . . eliminating glazing of welds and periodic refinishing when glazing loosens.
2. It can be used in a variety of patterns . . . lends itself adequately to any of the modern car designs.
3. Its metal surface is a perfect base for paint, lacquer, or enamel; the permanent bond between metal and plywood eliminates buckling and distorting highlights.
4. Its plywood base provides desirable sound-deadening qualities and tends to diminish objectionable and harmful vibration.
5. It is singularly adapted for economical remodeling of old equipment.
6. It can be fabricated at efficient speed with existing equipment by men ordinarily employed in car shops. Most fabricating and finishing can be done on the bench, under most satisfactory and economical working conditions.

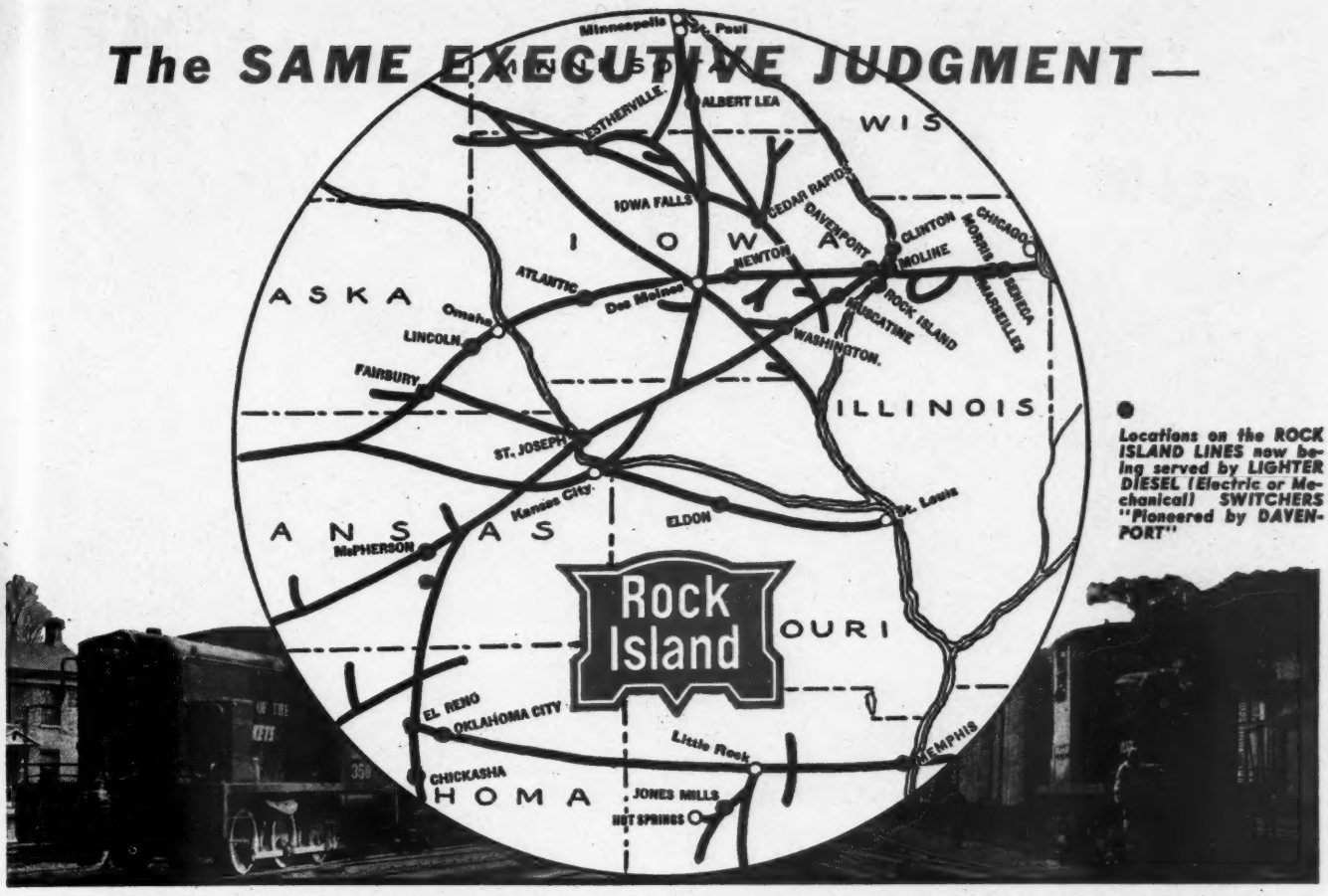
Right now we are working day and night supplying material for use by the armed forces. But when the drain of war is ended, we will again be free to cooperate with the railroads in utilizing the peacetime applications of Plymetl for new construction and remodeling of old equipment.

HASKELITE MANUFACTURING CORPORATION

Grand Rapids, 2, Michigan

Detroit, Michigan • New York City • Chicago, Illinois

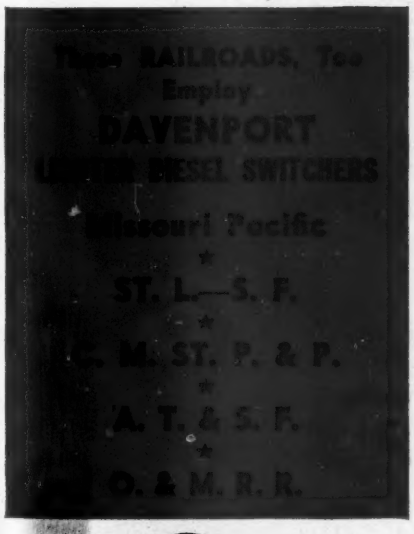
The SAME EXECUTIVE JUDGMENT—



● *Locations on the ROCK ISLAND LINES now being served by LIGHTER DIESEL (Electric or Mechanical) SWITCHERS "Pioneered by DAVENPORT"*

—that has done so much to strengthen the general condition of the ROCK ISLAND LINES, SAW the Possibilities, DEMONSTRATED them in Practice — and EXPANDED the USE of

LIGHTER DIESEL SWITCHERS
Pioneered by DAVENPORT



TOMORROW
When VICTORY has been won, Davenport will continue to contribute to the post war progress of an advancing America.

Throughout America, there are hundreds of locations, now served by obsolete, over-powered steam switchers, where service could be markedly improved and drastic operating savings be realized. The weight of post-war problems will heighten the value of the LIGHTER DIESEL SWITCHER with its 100% availability for one, two or three eight-hour shifts as desired; higher power ratio at slow speeds; quick acceleration and smoother, more sensitive response to controls; exceptional visibility for safety and efficiency; smoke-free, quiet operation; independence from engine houses, coal docks, ash pits and water facilities; and QUICK RETURN on investment through DIRECT SAVINGS. Enlist Davenport Lighter Diesel Switchers for post-war operating PROFITS.

Complete Information is Available to Railroad Executives on Request

DAVENPORT LOCOMOTIVE WORKS
A Division of Davenport Besler Corporation
DAVENPORT, IOWA, U. S. A.

BUILDERS OF STEAM • GASOLINE • DIESEL LOCOMOTIVES • ELECTRICAL OR MECHANICAL DRIVE

SOME OF THESE FIGHTING MEN ARE RAILROAD MEN!

and it still takes many, many men to run a railroad . . .

Troop trains roll across the U. S. night and day, day in and day out; freight moves across the nation at greater speeds than ever before—there is more tonnage on the rails today than at any time in the history of railroading. Men and materials are reaching their destinations by rail —safely and on time!

Union Asbestos & Rubber Co. insulation and packings are playing their part in enabling the railroads to maintain this war-time pace, in spite of a shortage of men and equipment. For many years these insulations (notably, Insutape and Wovenstone) and packings have been favorites on a majority of American Roads. They require a minimum of maintenance; will not shake-down, no matter how severe the weather or how tough the run; can be applied and re-applied over and over again, quickly and easily. Unarco insulations and packings are saving vital man-hours and conserving fuel for war-busy roads the country over.

UNARCO

For Engineers . . . A 72-page manual of Insulation methods—application on Boilers, Induced Draft Fans and Ducts, Turbines and Stop Valves, Flanges and Fittings; Marine Boilers, Pumps, Fans, Engines and Turbines, etc. Ask for Manual 48-967.

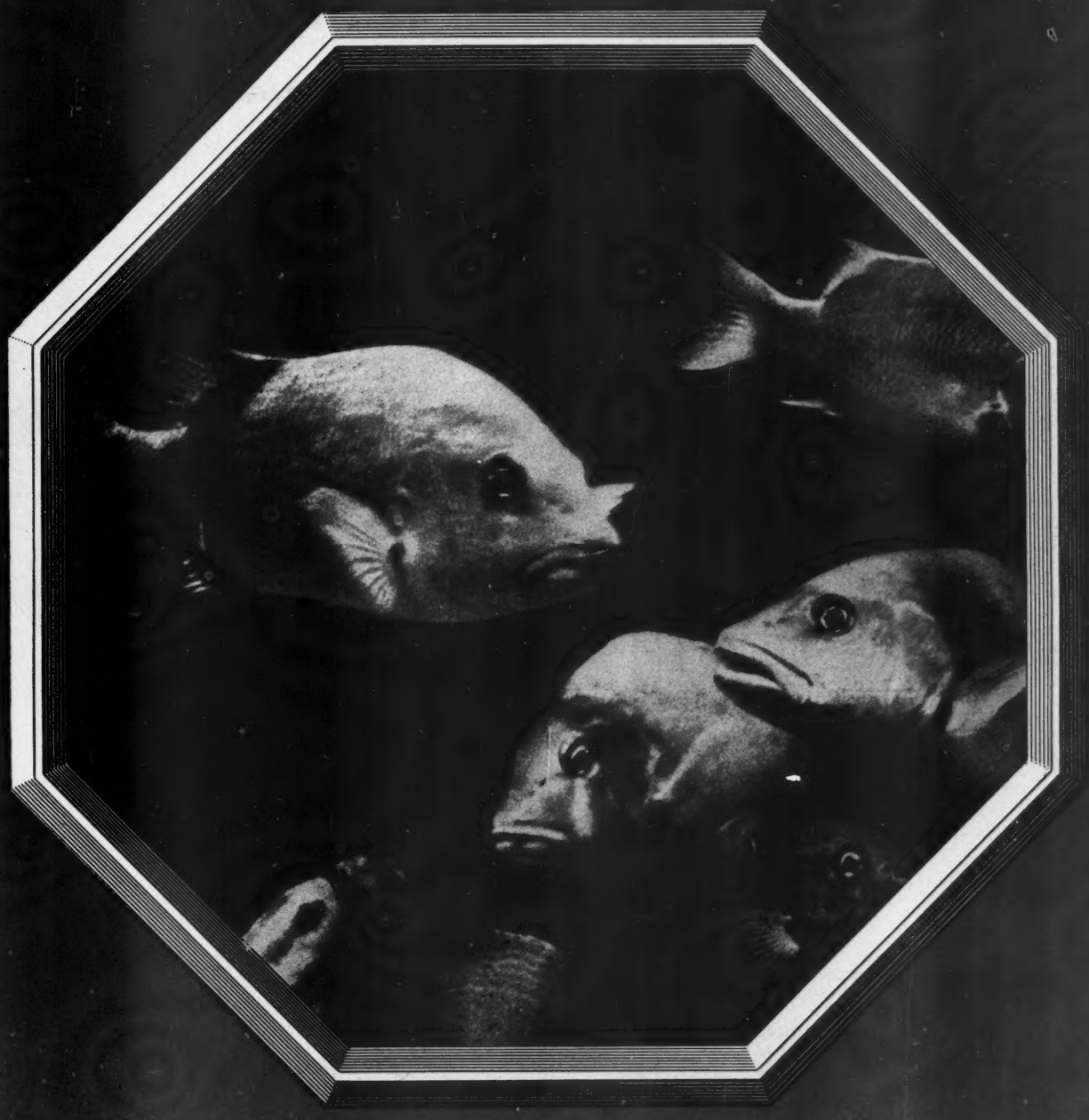
Insulation For Marine, Railroad, Aviation and Industrial Use

UNION ASBESTOS & RUBBER COMPANY

Offices: CHICAGO, NEW YORK, SAN FRANCISCO • ***Plants:*** CICERO, ILL., BLUE ISLAND, ILL., PATERSON, N. J.

TWO ARMY-NAVY "E" AWARDS FOR EXCELLENCE IN WAR PRODUCTION ONE TO THE CICERO, ILLINOIS PLANT; ONE TO THE PATERSON, NEW JERSEY, PLANT.

For Operating Executives, Engineers and Purchasing Departments . . . A complete catalog of Unarco Insulations and Packings. When writing ask for Manual 48-969.



NO PRIVACY IN AN AQUARIUM!

Nor for a freight-car truck—viewed from our "glass-bottomed boat," the famous A. S. F. Test Train. There, nose to window, our engineers watch trucks *in action*, as a practical check against the complex scientific graphs recorded by this reasearch laboratory on wheels. It's sidetracked now—war has right of way—but the lessons already learned there are being translated into the *greatest* trucks ever built by America's greatest steelcaster.

AMERICAN STEEL FOUNDRIES

CHICAGO

MINT-MARK OF FINE CAST STEEL

Sure, we all know Grip Nut products and we like them.
They are easy to put on and they Stay Put.
SPECIAL FRONT END NUT
Hex. only
GRIP HOLDING NUT
Hex. or square
GRIP LOCO NUT
Hex. only
GRIP LOCK NUT
Hex. or square
GRIP UNIT NUT
Hex. or square

There is a Grip Nut for every purpose.
Designed by practical Railroad men.
Precision engineered.
Millions in daily service everywhere.

Complete specifications, samples and prices available upon request.

GRIP NUT COMPANY
310 South Michigan Avenue
CHICAGO, ILLINOIS

Regional Offices: St. Paul, Minneapolis, St. Louis, San Francisco, Cleveland, Salt Lake City, Charlotte, N. C., Pittsburgh, New York

Serving American Railroads since 1906

YOU CAN HELP YOUR STEEL FOUNDRY

Help You

The steel castings industry—including your steel foundry—is anxious to contribute as largely as possible to war production.

We realize that "plenty—in time" will save many more lives, and bring victory quicker, than "too little—too late."

Yet so great are the wartime demands for steel castings that most foundries, even with increased facilities, are operating today at full rated capacity or beyond.

The following suggestions are offered in the hope that they may enable the steel castings industry to serve *you* better, and serve America better.

1. *ANTICIPATE YOUR NEEDS*

Specify deliveries of steel castings that meet your schedule requirements. You may penalize another user of castings if you hoard your own supply, or require deliveries far in advance of actual need.

2. *PLAN YOUR DESIGNS*

Many new products are being built to meet the demands of war. In planning something new, it always pays to consult the foundry engineer when making your designs. He can save you money, time and trouble.

3. *PLAN YOUR PATTERNS*

You are seeking the finished result. The foundry engineer knows how to attain that result in the shortest time and at the lowest cost. Use his experience in planning and building your patterns.

4. *SCHEDULE DELIVERIES*

Steel founders are co-operative people. Their one purpose is to help you produce—up to schedule. Take your foundry into your full confidence, and let them work *with* you instead of merely *for* you.

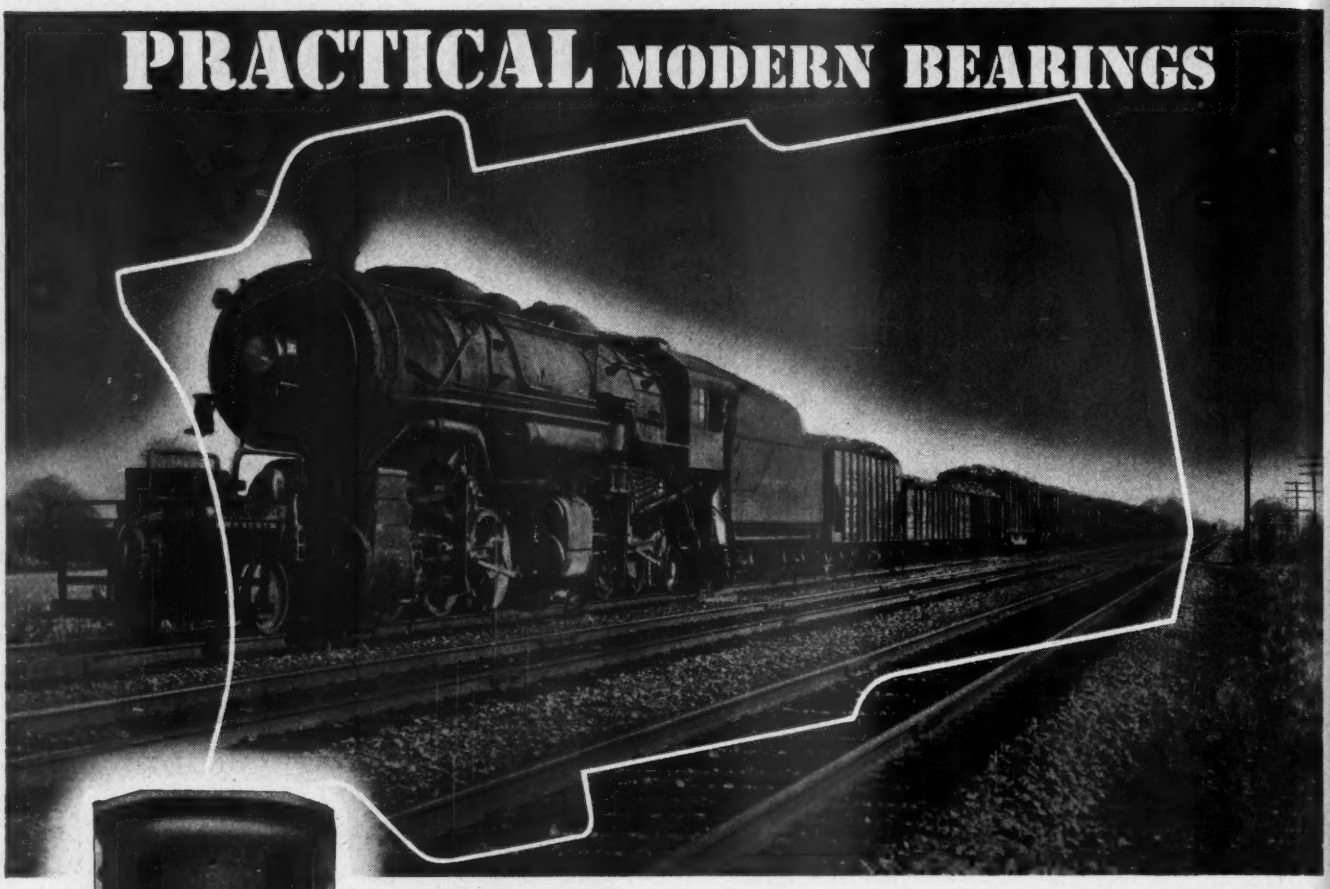
These suggestions sound like obvious procedures. But in all cases where they are followed, it is noted that there is an adequate and timely supply of sound steel castings.

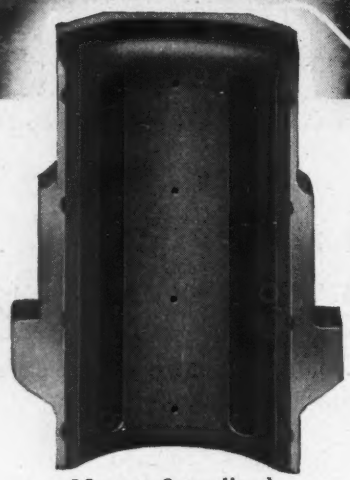
Steel Founders' Society of America, Cleveland, Ohio

MODERNIZE AND IMPROVE YOUR PRODUCT WITH

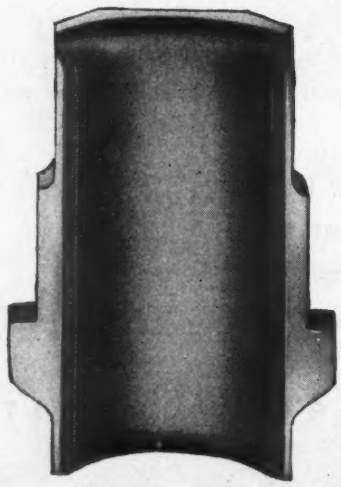
STEEL CASTINGS

PRACTICAL MODERN BEARINGS





Magnus Satco-lined Oil-tube Bearing.



Magnus Satco-lined Journal Bearing

Magnus Satco-lined Journal Bearings represent a *practical* method of modernizing bearing service. They are interchangeable on the standard cars of all railroads on the North American continent.

They are so inexpensive that they can be applied to the oldest cars; and when cars are scrapped, the bearings can be removed and used for replacement on other cars, or turned in for a large credit on new bearings.

In Satco Oil-tube Bearings, oil is forced up through passages and distributed over the journal, assuring positive and plentiful lubrication.

Satco Metal has a lower coefficient of friction and higher resistance against deformation at high speeds than conventional babbitt metals.

MAGNUS METAL CORPORATION
CHICAGO NEW YORK

COMING AT YOU, SCHICKLGRUBER!

MAYBE you overlooked this machine when you planned your world conquest, Adolf. But pretty soon you'll be seeing it in your nightmares—seventeen tons of "Caterpillar" Diesel D8 Tractor burying you under earth and rock!

You were told those soft, money-grubbing Americans knew nothing of making war. Well, we're learning. But there was one important part of war we didn't have to learn, and that was *moving dirt.* Did you ever stop to figure how many million tons of it would have to be moved to win this war, Adolf? You'd be surprised.

We've been using "Caterpillar" Diesels for quite a while. They were ready when we had to build Army camps and Navy bases and airports and war plants in such a hurry. They moved billions of yards of earth. And, meanwhile, over in England they did their part in stopping your invasion. How do you suppose those bombed airfields were repaired so fast, and the rubble of cities cleared away, and channel fortifications thrown up?

"Caterpillar" Diesel Tractors sort of got in your way in Egypt, too. Did Rommel ever tell you about the forty miles of tank-traps they dug on the Alamein line? Or the trans-African airway they helped build?

Next time you talk to Tojo ask him how the Yank engineers tear roads out of the jungle and the artillery hauls up its big guns with "Caterpillar" Diesels. He learned on New Guinea and Guadalcanal.

So look in your crystal ball, Schicklgruber, and remember never to start a war unless you've got the horsepower to finish it.

CATERPILLAR DIESEL

REG. U.S. PAT. OFF.

CATERPILLAR TRACTOR CO., PEORIA, ILLINOIS

TO WIN THE WAR: WORK—FIGHT—BUY U. S. WAR BONDS!

LAST YEAR'S BONDS GOT US STARTED

THIS YEAR'S BONDS

ARE TO WIN!

★ Last year saw nearly 30,000,000 workers voluntarily buying War Bonds through some 175,000 Pay-Roll Savings Plans. And buying these War Bonds at an average rate of practically 10% of their gross pay!

This year we've got to top *all* these figures—and top them handsomely! For the swiftly accelerated purchase of War Bonds is one of the greatest services we can render to our country . . . and to our own sons . . . and our neighbors' sons. Through the mounting purchase of War Bonds we forge a more potent weapon of victory, and build stronger bulwarks for the preservation of the American way of life.

"But there's a Pay-Roll Savings Plan already running in my plant."

Sure, there is—but how long is it since *you've* done anything about it? These plans won't run without winding, any more than your watch! Check up on it today. If it doesn't show substantially more than 10% of your plant's pay-roll going into War Bonds, it needs winding!

And you're the man to wind it! Organize a vigorous drive. In just 6 days, a large airplane manufacturer increased his plant's showing from 35% of employees and 2½% of pay-roll, to 98% of employees and 12% of pay-roll. A large West Coast shipyard keeps participation jacked up to 14% of pay-roll! You can do as well, or better.

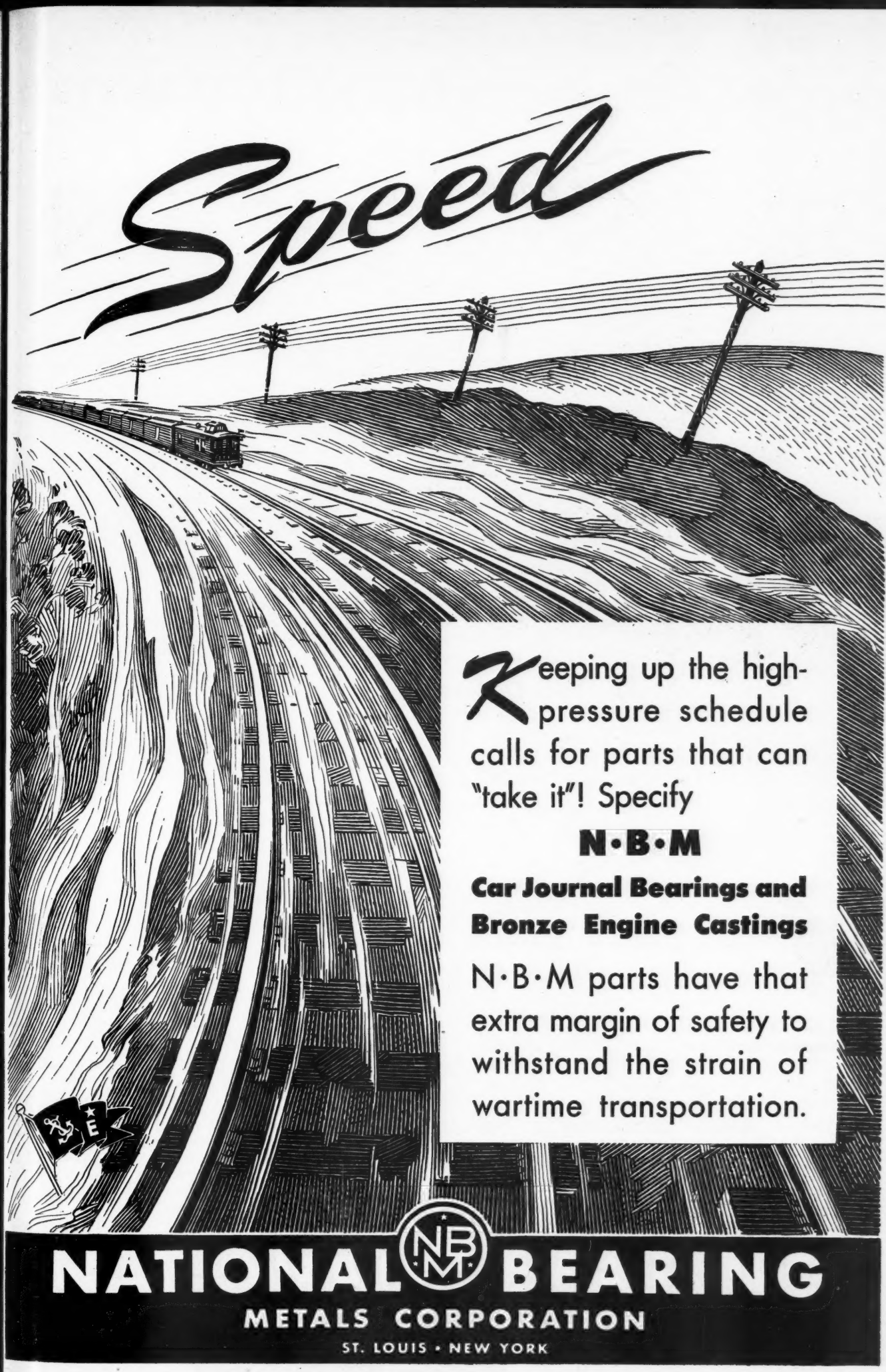
By so doing, you help your nation, you help your workers, and you also help yourself. In plant after plant, the successful working out of a Pay-Roll Savings Plan has given labor and management a common interest and a common goal. Company spirit soars. Minor misunderstandings and disputes head downward, and production swings up.

War Bonds will help us win the war, and help close the inflationary gap. And they won't stop working when victory comes! On the contrary—they will furnish a reservoir of purchasing power to help American business re-establish itself in the markets of peace. *Remember, the bond charts of today are the sales curves of tomorrow!*

You've done your bit Now do your best!

THIS SPACE IS A CONTRIBUTION TO AMERICA'S ALL-OUT WAR EFFORT BY

RAILWAY AGE



Keeping up the high-pressure schedule calls for parts that can "take it"! Specify

N·B·M

Car Journal Bearings and Bronze Engine Castings

N·B·M parts have that extra margin of safety to withstand the strain of wartime transportation.

NATIONAL BEARING METALS CORPORATION

ST. LOUIS · NEW YORK

For both **FREIGHT**

BALDWIN
SERVES THE NATION
WHICH THE RAILROADS
HELPED
TO BUILD

BLW THE BALDWIN GROUP

THE
BALDWIN
LOCOMOTIVE WORKS
Philadelphia

PASSENGER service

Boston and Maine uses

Modern Baldwin Steam Power

Eighteen of these Baldwin mountain type locomotives are working for Victory on the lines of the Boston & Maine Railroad. They have helped to break operating records in freight service and have taken their turn on passenger trains when needed; another example of the versatility of modern steam power in meeting today's unprecedented traffic demands.

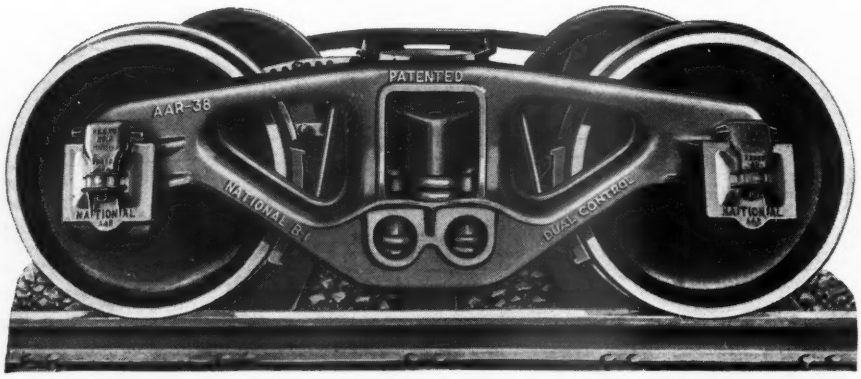
Baldwin locomotives—steam, diesel and electric—are working for Victory throughout the length and breadth of America. Baldwin power is serving the armed forces on far-flung battle fronts.

Tanks, guns and other ordnance, for which Baldwin flies the Army-Navy "E", are a part of Baldwin's contribution to the great task of defeating our enemies.

IN the last year the average load of freight per train more than doubled, and the average load per car was the highest on record. Thus an enormous additional load was put on all existing freight equipment.

This means that every car should be protected to the utmost.

The utmost protection of cars and lading is assured when cars are equipped with National B-1 Trucks with Dual Control and National M-17-A Draft Gears.



National B-1 Truck with Dual Control for Smooth Riding and Safety

National M-17-A Draft Gear for smooth action and efficient shock absorption

A.A.R. Approved

NATIONAL MALLEABLE AND STEEL CASTINGS CO.

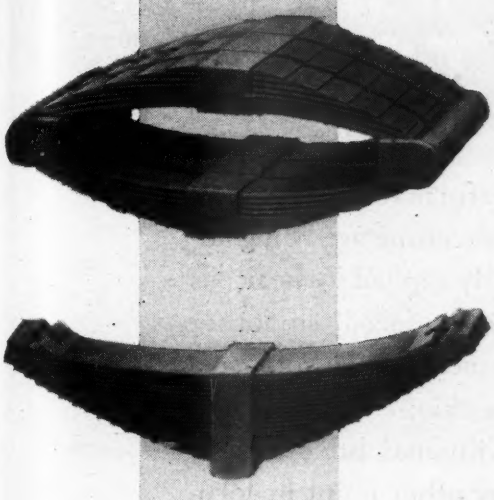
General Offices: CLEVELAND, OHIO

Sales Offices: New York, Philadelphia, Chicago, St. Louis, San Francisco

Works: Cleveland, Chicago, Indianapolis, Sharon, Pa., Melrose Park, Ill.

Canadian Representatives: Railway and Power Engineering Corporation, Ltd., Toronto and Montreal

READY FOR ACTION ON *Railway Springs*



THE bigger they are the more they require "Railway Springs." Heavier axle loads, higher speeds and constant operation of locomotives all add to the burden of reliable and consistent easy riding springs. "Railway" Springs are manufactured under exacting formulas and high standards of workmanship for just such service. Our engineers will be glad to help you with your spring problems.

AMERICAN LOCOMOTIVE COMPANY

RAILWAY STEEL-SPRING DIVISION

30 CHURCH STREET NEW YORK, N. Y.

5 Thoroughbreds

...which "GO PLACES" on Hyatts!

★You see them now at a Washington, D. C. station, poised momentarily for a news photo.

Each of these five handsome, strong, speedy iron steeds represents a different railroad.

Each reflects the tremendous capacity of all American railroads to carry out the many assignments they have undertaken toward helping to win the war.

Each of these modern locomotives is equipped with Hyatt Roller Bearing Journal Boxes.

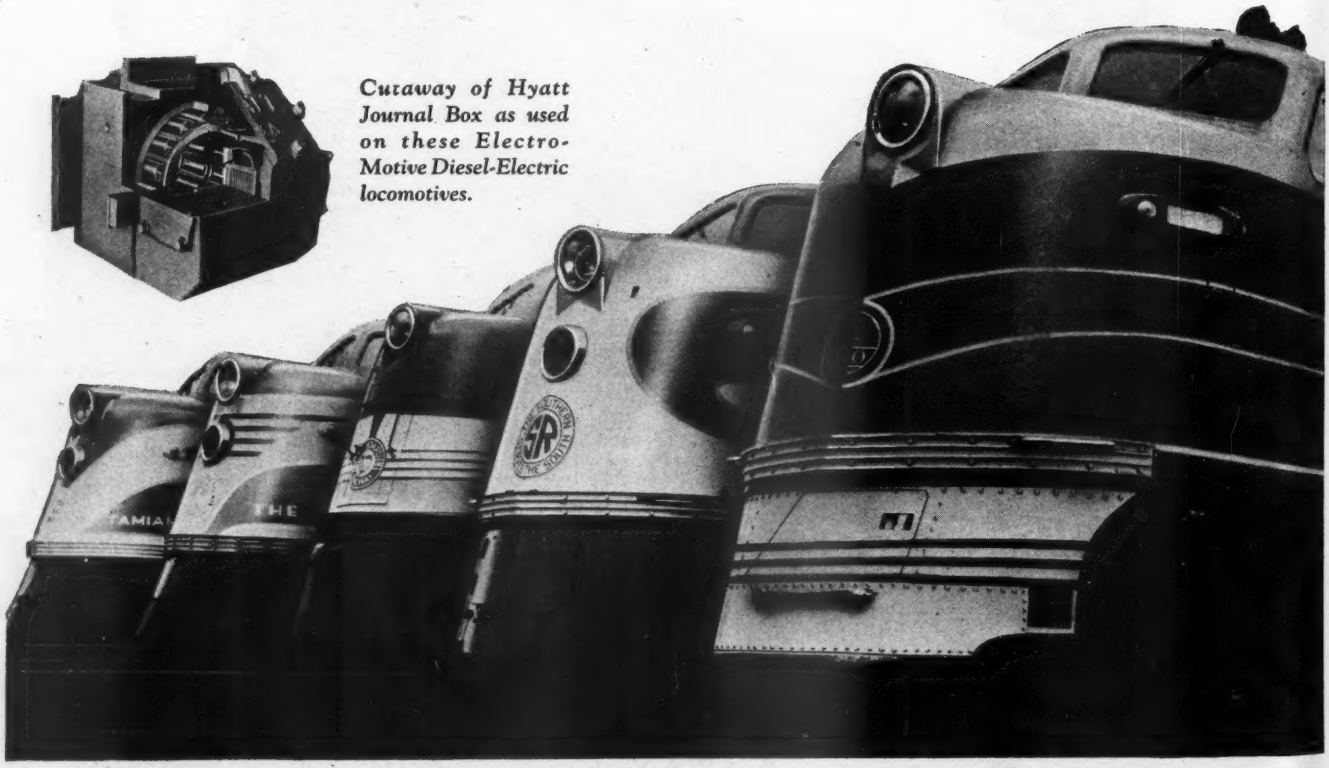
Thus, performance advances made in peacetime are being advantageously applied to the needs of war: more speed, smoother running, and—above all—sustained operation.

At the journal boxes, more than at any other point in locomotive design, these qualities are determined. And with Hyatt Journal Boxes, they are regularly assured.

★

Hyatt Bearings Division, General Motors Corporation, Harrison, N. J.

Cutaway of Hyatt Journal Box as used on these Electro-Motive Diesel-Electric locomotives.



HYATT ROLLER BEARINGS

HSGI *Wear Resisting* PARTS

On the New Power for the NEW YORK CENTRAL

For many years the 4-8-2 type locomotives have been the principal source of main line freight power on the New York Central.

This power is especially outstanding for its dependable performance, high monthly mileage, economical fuel consumption and low maintenance cost.

As in the past, HUNT-SPILLER *Air Furnace* GUN IRON Wear-resisting Parts were applied on all of the 25 new locomotives built by Lima for the New York Central.

HSGI
Reg. U. S. Trade Mark
Cylinder Bushings
Cylinder Packing Rings
Pistons or Piston Bull Rings
Valve Bushings
Valve Packing Rings
Valve Bull Rings
Crosshead Shoes
Hub Liners
Shoes and Wedges
Floating Rod Bushings

Finished Parts
Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings, All Shapes
Light Weight Valves
Cylinder Liners and Pistons
for Diesel Service

HUNT-SPILLER MFG. CORPORATION
V. W. Ellet, *President* E. J. Fuller, *Vice-Pres. & Gen. Mgr.*
383 Dorchester Ave. *Office & Works* South Boston, Mass.
Canadian Representative: Joseph Robb & Co., Ltd., 5575 Cote St. Paul Rd., Montreal, P. Q.
Export Agent for Latin America:
International Rwy. Supply Co., 30 Church Street, New York, N. Y.

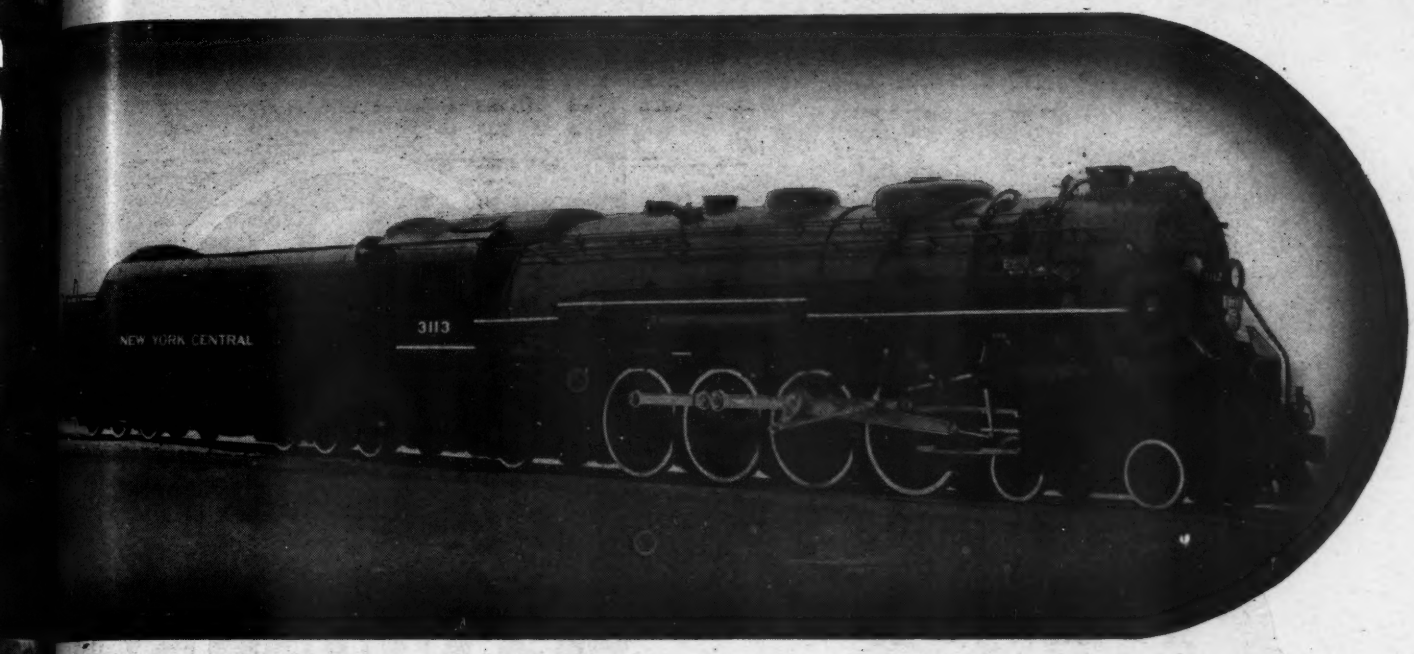
HUNT-SPILLER GUN IRON
Air Furnace

PROVEN MATERIALS

for one of the toughest stress jobs in the arsenal of democracy . . .

WARNER

CORPORATION OF AMERICA · NEW YORK, N. Y.



One of the most vital factors in maintaining the terrific pace of the American war effort is the modern high-speed locomotive—hauling the raw materials, the finished products and the manpower for the greatest military effort the world has ever seen.

It would be hard to exaggerate the engineering achievement represented by these locomotives which require specialized designs and carefully selected materials to deal with high pressures and temperatures, extremes of driving power, bearing pressure, stress and friction.

Of all these problems, one of the toughest involves the main drive and side rods and other revolving and reciprocating parts. At high speed, these parts are spun around and back and forth on off-center crank-pins on the sides of the drive wheels—at velocities that blur before the eye.

These parts must therefore have great strength and toughness. But they must also be as light as possible. At high speed, enormous centrifugal and longitudinal forces are created by the motions of these parts—forces which are multiples of the weight of the parts involved and which limit the top speeds of safe operation.

These parts therefore present a challenging problem in design—to provide adequate bearing surfaces and yet keep cross section at a minimum.

Then there is the problem of finding materials which can stand the stress, impacts and friction of these streamlined designs.

Being sections of the heavier type where uniformity of structure is important and maximum internal stress is even more important, drastic heat treatment is to be avoided. Furthermore for maximum machine shop performance, fine machining qualities are essential.

To meet these difficult specifications, hundreds of these high speed giants have been equipped with manganese vanadium steel main and side rods and other parts—

Because manganese vanadium affords an exceptional combination of high yield point, high ductility, high fatigue value and unusual resistance to impact down to temperatures well below 0°F.;

Because manganese vanadium does not require quenching to develop the required properties but merely normalizing and tempering;

Because, of all steels, manganese vanadium is one of the most practical, reliable and simple to handle for these applications . . . a steel that can be properly and safely handled in every phase of fabrication and heat-treatment with the facilities in most railroad shops.

FERRO-ALLOYS

BARCO PRODUCTS CONTRIBUTE TO WARTIME RAILROADING EFFICIENCY

Designed for high speed freight service as well as high speed passenger service, these New York Central locomotives are equipped with Barco float type low water alarms contributing to the safety of the crews and the large investment involved.

Other Barco devices used on these locomotives assist in effecting low maintenance cost with high efficiency.

BARCO PRODUCTS

- BARCO Steam Heat Connections on rear of tender and between cars.
- BARCO All Metal Engine Tender Connections now available for feed-water connections up to and including 4" pipe, as well as for oil, air and steam lines.
- BARCO Joints provide flexibility between auxiliary devices and piping.
- BARCO Float Type Low Water Alarm.
- BARCO Type M Power Reverse Gears and Operating Valves.
- BARCO Gasoline Operated Unit Tytampers and Hammers.

BARCO MANUFACTURING COMPANY
1800 W Winnemac Ave. NOT INCORPORATED Chicago, Illinois
In Canada THE HOLDEN COMPANY, LTD.
Montreal — Moncton — Toronto — Winnipeg — Vancouver

25 More 4-8-2's for Fast High-Capacity Service on the New York Central

NEW YORK CENTRAL SYSTEM

These powerful, modern, new locomotives are equipped with the following **COMMONWEALTH** Cast Steel Devices:

- **Pilots and Pilot Beams**
- **4-Wheel Engine Trucks**
- **2-Wheel Trailer Trucks**
- **Locomotive Beds**
- **Boxpok Driving Wheel Centers**
- **Ash Pans**
- **Waterbottom Tender Frames**
- **6-Wheel Tender Trucks**

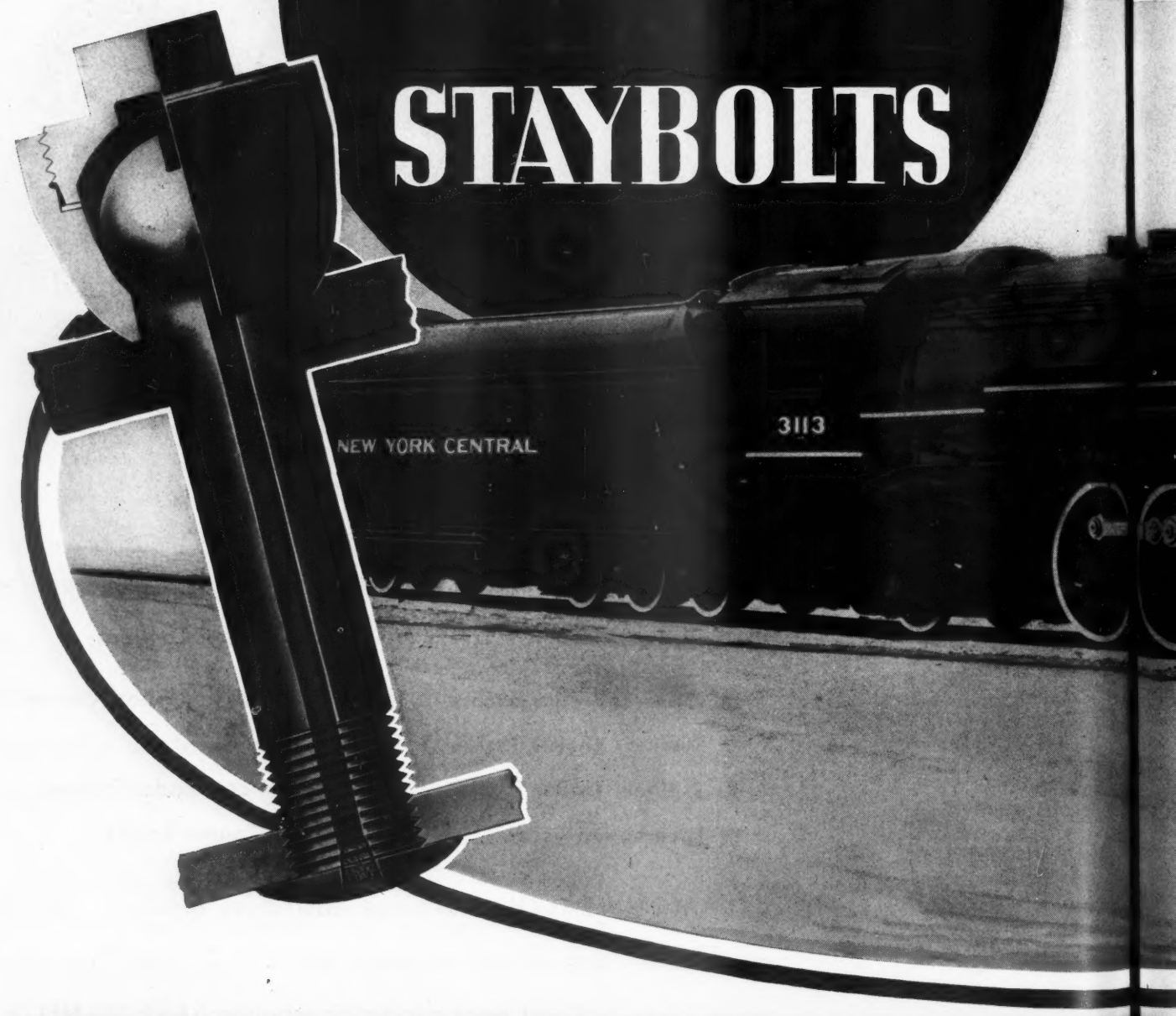
COMMONWEALTH one-piece cast steel products contribute much to the high utilization rate of the N. Y. C. Fleet. They simplify engine terminal and back shop maintenance; **SAVE MANPOWER.**

GENERAL STEEL CASTINGS

EDDYSTONE, PA. • GRANITE CITY, ILL. • MADISON, ILL.

Maximum Safety

HOLLOW STAYBOLTS

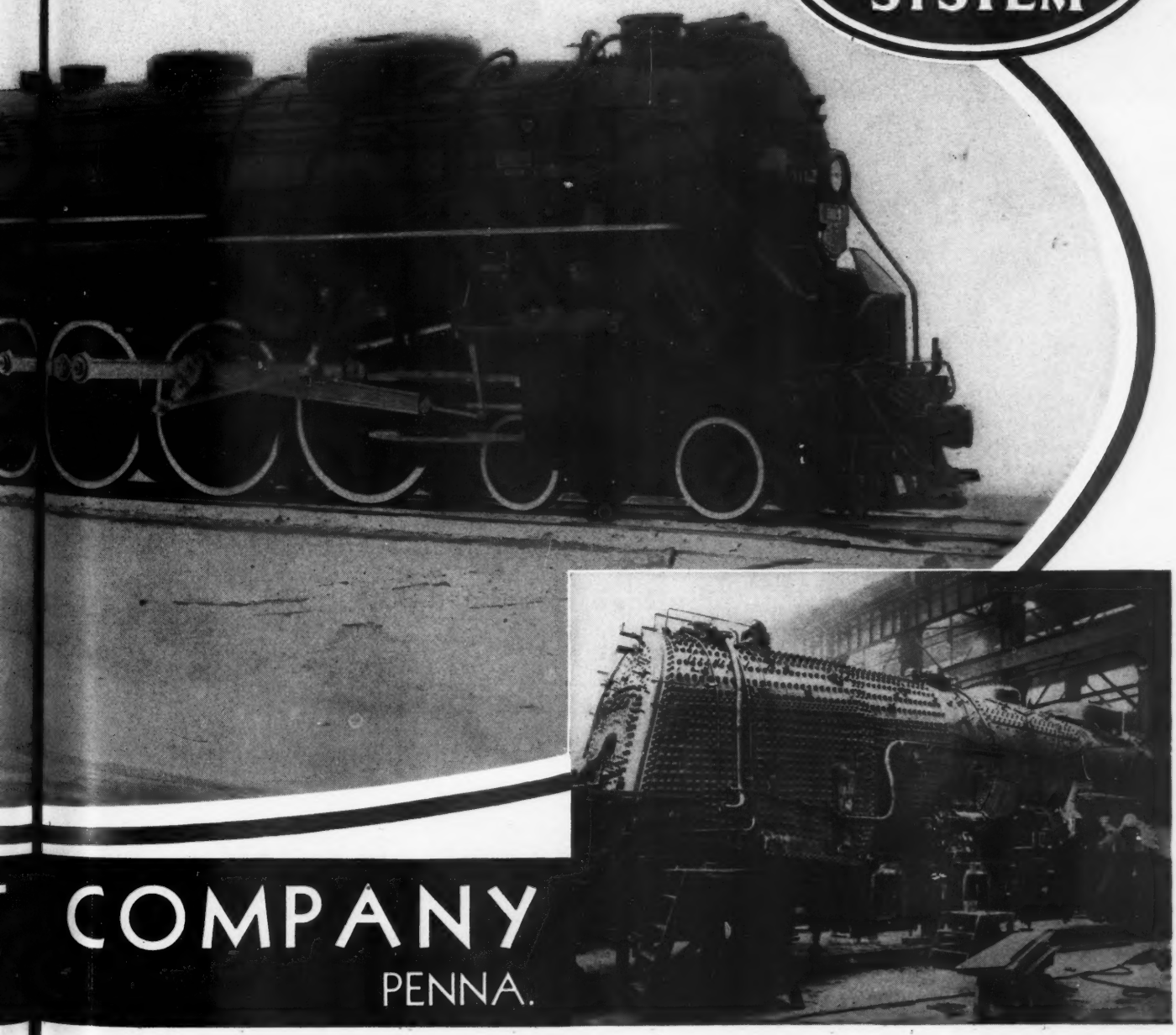


FLANNERY BOLT
BRIDGEVILLE,

Minimum Maintenance

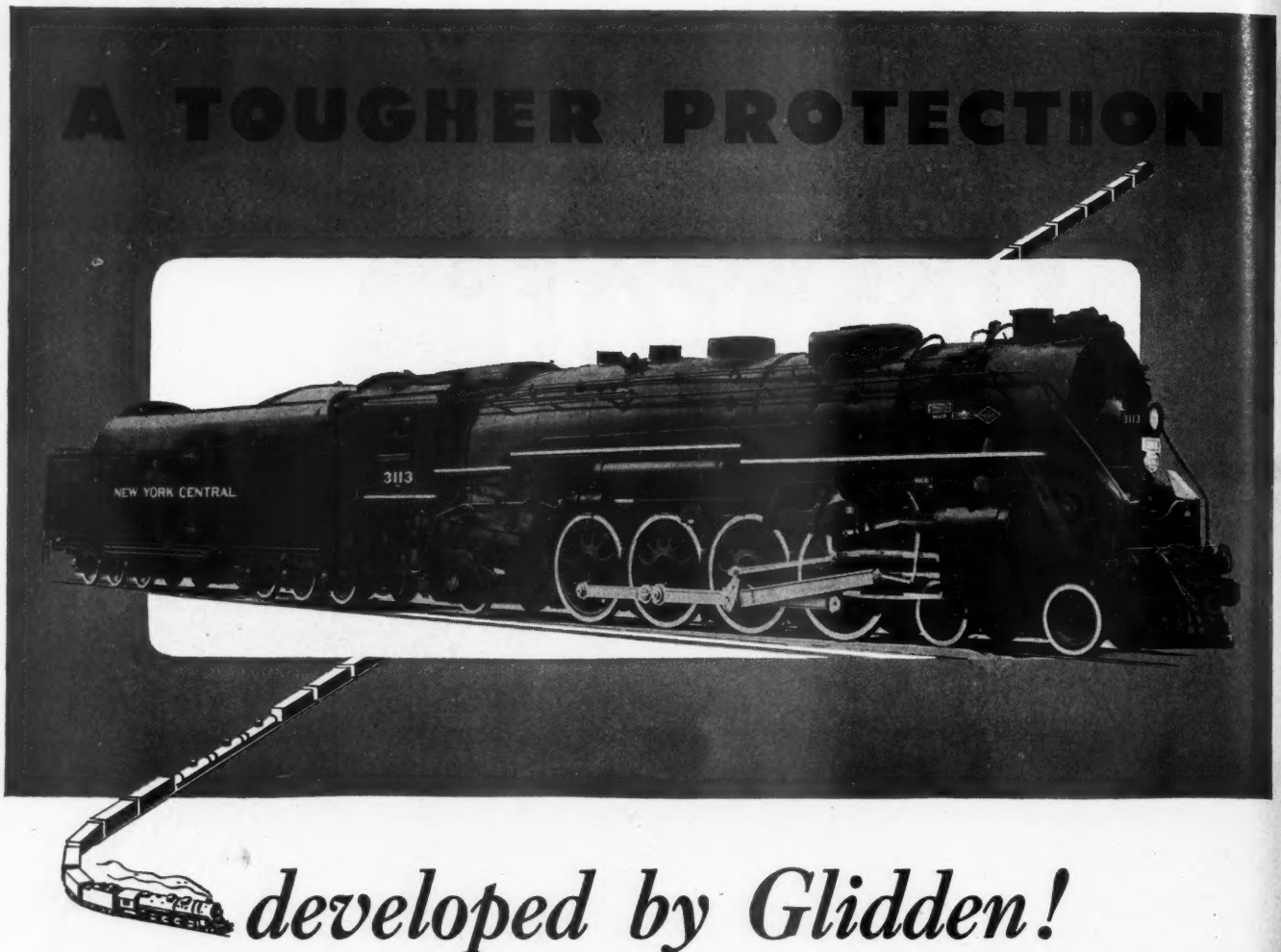
of FIREBOXES on the New Power for the

NEW YORK CENTRAL SYSTEM



COMPANY

PENNA.



developed by Glidden!

• The twenty-five new 4-8-2's that are going into service on the New York Central Lines are protected with a formulated finish developed by Glidden.

Glidden considers it a privilege to be asked to provide the finishing materials and the finishing system for this critically needed locomotive equipment – a privilege which Time-Tested materials will acknowledge with longer service.

THE GLIDDEN COMPANY • National Headquarters: Cleveland, Ohio

Factories or Branches in Principal Cities

GLIDDEN

Everywhere on Everything

Reg. U. S. Pat. Off.
TIME-TESTED
PAINTS · VARNISHES · LACQUERS · ENAMELS

GLIDDEN PRODUCTS CARRY THIS FAMOUS MARK OF QUALITY

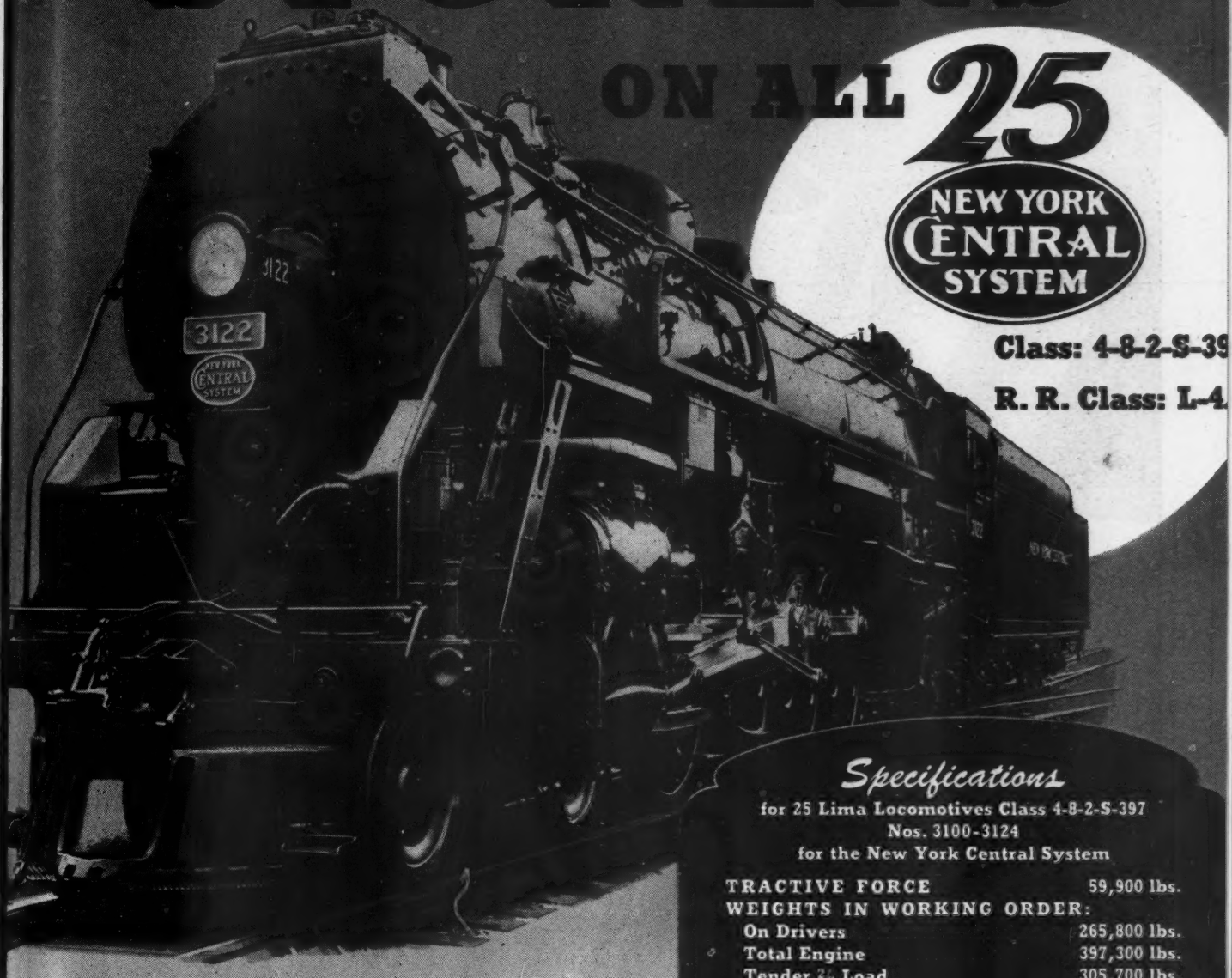
STANDARD STOKERS

ON ALL 25

NEW YORK CENTRAL SYSTEM

Class: 4-8-2-S-39

R. R. Class: L-4



KEEP 'EM ROLLING AT TOP SPEED

Specifications

for 25 Lima Locomotives Class 4-8-2-S-397
Nos. 3100-3124
for the New York Central System

TRACTIVE FORCE	59,900 lbs.
WEIGHTS IN WORKING ORDER:	
On Drivers	265,800 lbs.
Total Engine	397,300 lbs.
Tender ⅔ Load	305,700 lbs.
WHEEL BASES:	
Driving	19′ 0″
Engine	43′ 1″
Engine and Tender	95′ 11½″
DRIVING WHEELS (Diameter)	72″
CYLINDERS (Diameter and Stroke)	26″ x 30″
BOILER PRESSURE	250 lbs.
GRATE AREA	75.3 sq. ft.
HEATING SURFACES:	
Total Heating	4676 sq. ft.
Superheating	2103 sq. ft.
TENDER (Coal capacity)	42½ tons
TENDER (Water capacity)	15,500 gallons
STOKER	STANDARD HT
COAL PUSHER	STANDARD DA

HE STANDARD STOKER COMPANY, INC

NEW YORK • CHICAGO • ERIE • MONTREAL

55 6

REG. U. S. PAT. OFFICE

BOILER TUBES THAT MEET EVERY DEMAND FOR *Service* IN MODERN LOCOMOTIVES

One of the twenty-five new New York Central locomotives of the 4-8-2 type, recently built by Lima Locomotive Works, in which Globe boiler tubes and super heater flues were used. These locomotives are known as the L-4a class and are the first of the L type to have driving wheels 72 inches in diameter. They are fully equipped for either passenger or freight service.

This is another example of the modern locomotives using Globe boiler tubes for dependable, long-lasting service.

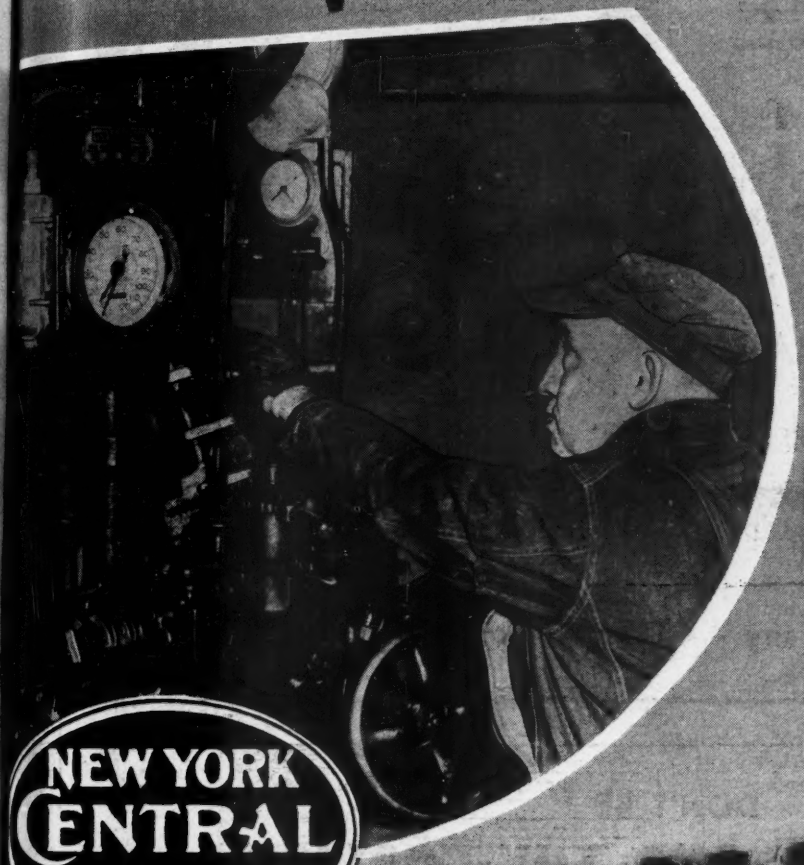
GLOBE TUBES

★ STAINLESS TUBES
★ BOILER TUBES
★ GLOBEIRON TUBING
★ GLOWELD TUBES
★ CONDENSER AND HEAT EXCHANGER TUBES
★ MECHANICAL TUBING

GLOBE STEEL *Tubes*

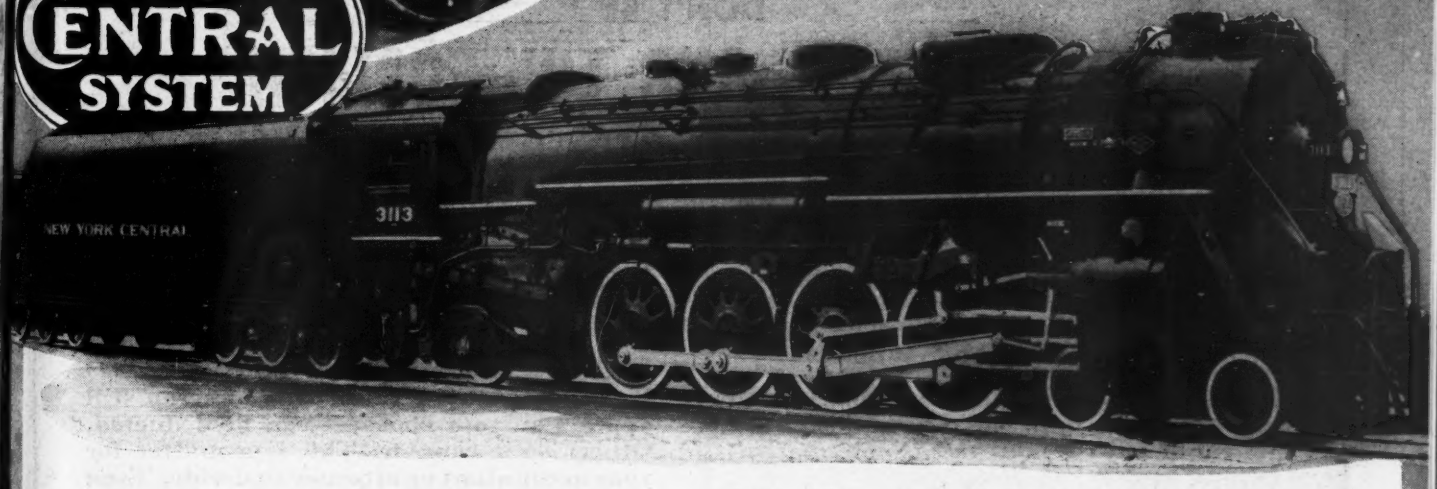
GLOBE STEEL TUBES CO., *Milwaukee, Wisconsin, U.S.A.*

THE VALVE PILOT



GUIDES THE OPERATION OF THESE MODERN NEW YORK CENTRAL LOCOMOTIVES

NEW YORK CENTRAL SYSTEM



Guess work in estimating speed and cut-off is eliminated. Mile by mile the Valve Pilot produces efficiency and economy of operation and records the result.

VALVE PILOT CORPORATION

230 Park Avenue, New York City

WE ARE PROUD

TO JOIN THE NEW YORK CENTRAL

IN CONFRONTING

AMERICA'S TRANSPORTATION PROBLEM

Our Monogram, a Symbol of Braking Efficiency, can be found on
The New York Central's Newest 4-8-2 Locomotives —
Our Brake Equipment is Your Protection.

The New York Air Brake Company - 420 Lexington Ave. - New York, N. Y.

DON'T BE

PENNY-WISE AND TON-FOOLISH

ABOUT SCRAP

Run Your Scrap Program According to This Rule:

If it hasn't been used for three months and if some one can't prove that it's going to be used in the next three—sell it—or scrap it! Scrap and used equipment dealers pay well for useable machinery and materials

It's easy to salve your salvage conscience by turning in the junk you'd been meaning to get rid of anyway *But this is not enough!*

To end the shortage of heavy steel scrap you've got to dig deeper. Mills are going to need about 26,000,000 tons of purchased scrap this year! To make sure that the men we've sent to war will have the weapons they need, you've got to get rid of every piece of idle "slacker" metal in your plant. Sell it —either as scrap or as second hand equipment.

Can't Get Enough Copper

Shortest of all is copper, and officials say this critical shortage will continue for the duration. Copper refineries are not operating at full capacity . . . When they should be running wide open! Who knows how long that one scarcity may delay the final big push?

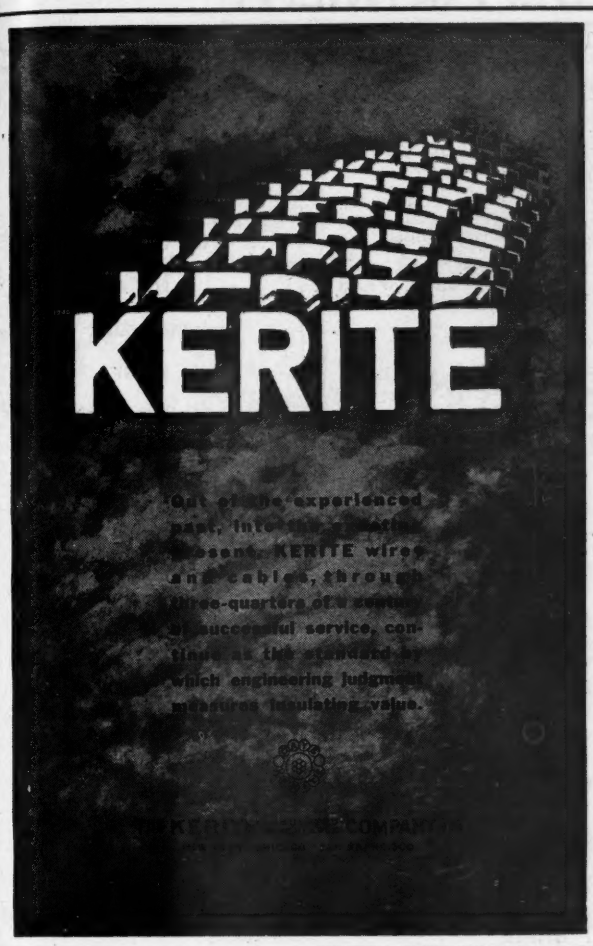
Deduct Value From Your Income Tax

Remember . . . if the item you scrap still appears on your books, it can be deducted. Otherwise it cannot. This is a matter for your accountant or attorney to decide. Even if not deductible, don't hoard it. For used machinery especially there's a big and continuing demand. *Somebody needs it—badly!*

BUSINESS PRESS INDUSTRIAL SCRAP COMMITTEE

Room 1310, 50 Rockefeller Plaza, N. Y. C.

If you have done a successful salvage job at your plant, send details and pictures to this magazine. Send for booklet—"Primer of Industrial Scrap."



KING METALLIC PACKING

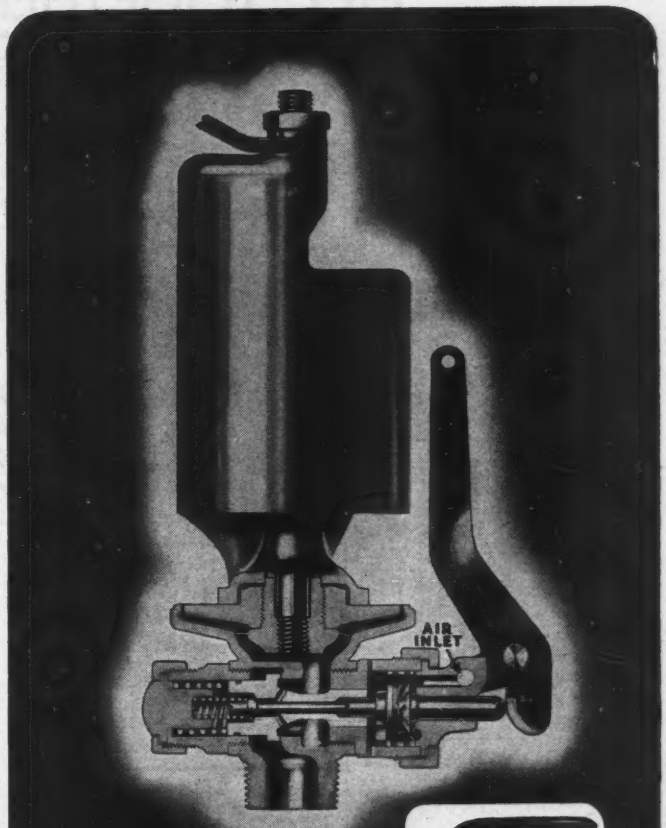
KING METALLIC PACKING is applied to the piston rods, valve stems and air pumps of the 25 newest 4-8-2 type locomotives built for the New York Central.

Its ability to withstand maximum steam pressures and temperatures reduces fuel consumption and maintenance costs.

THE U. S. METALLIC PACKING CO.
Philadelphia Pennsylvania

Representatives in Canada

Jos. Robb & Co. Ltd., Montreal



Viloco

PNEUMATICALLY OPERATED STEAM WHISTLE

For better pneumatic control, the new Viloco Steam Whistle has the operating mechanism built integral with the balanced steam valve and is self-contained within the whistle bowl. ★ Whistle can be located near the front end of the locomotive and operated by means of valves located within easy reach of the engineer and fireman for hand or foot operation. ★ Because of this easy and convenient manner of blowing the whistle, signals can be more rigidly adhered to. ★ These whistles can be furnished for saturated or superheated steam.

Write for particulars

VILOCO RAILWAY EQUIPMENT CO.
332 SOUTH MICHIGAN AVENUE · CHICAGO

GET TOGETHER DEPARTMENT

EDUCATIONAL

Educational Services for RAILROAD MEN

Maintenance of Way—
Mechanical—
Signal—
Operating—
Engineers and Firemen—
All Supervisors—

The Railway Educational Bureau
Omaha, Nebraska

WANTED

200 to 300-ton Wheel Press
18" to 24" Stroke
Approximately 60" between Tension Bars.

SOUTH BUFFALO RAILWAY COMPANY
Bethlehem, Pa.
R. F. Maguire, Purchasing Agent

POSITION WANTED

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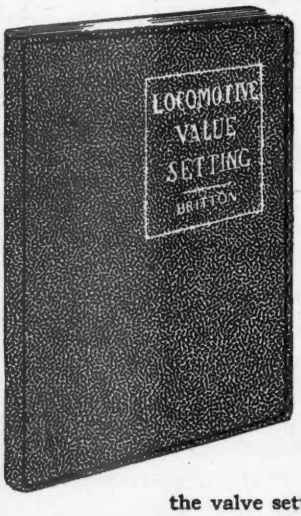

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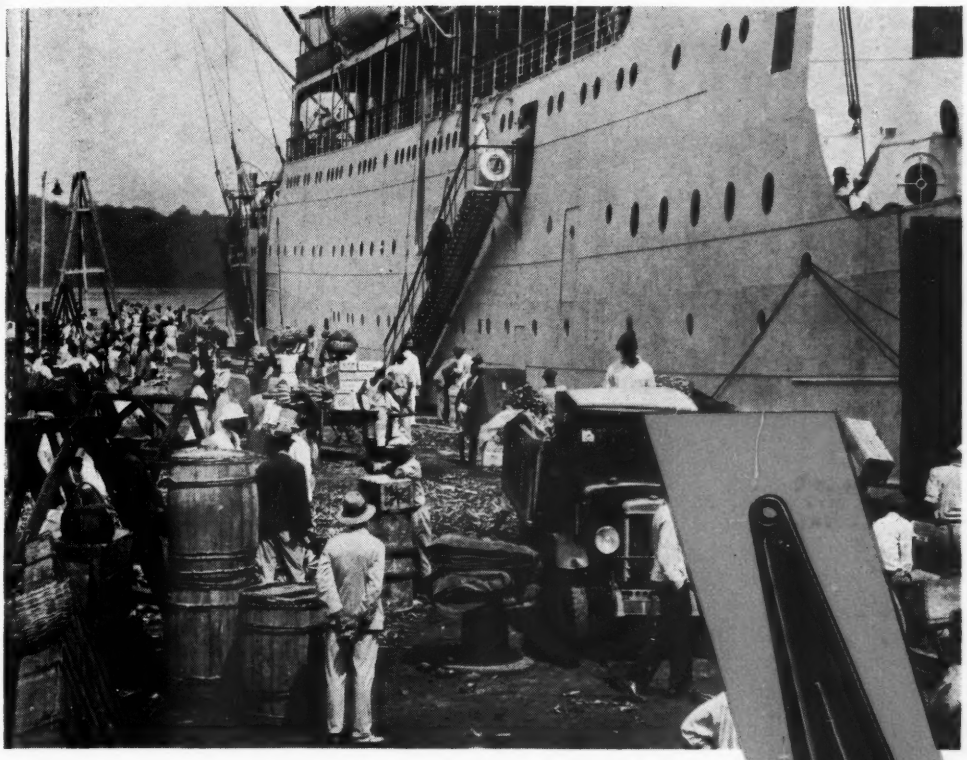

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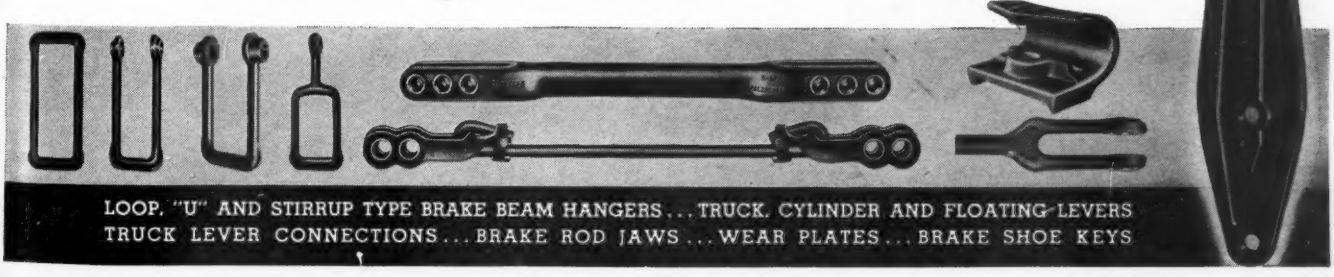

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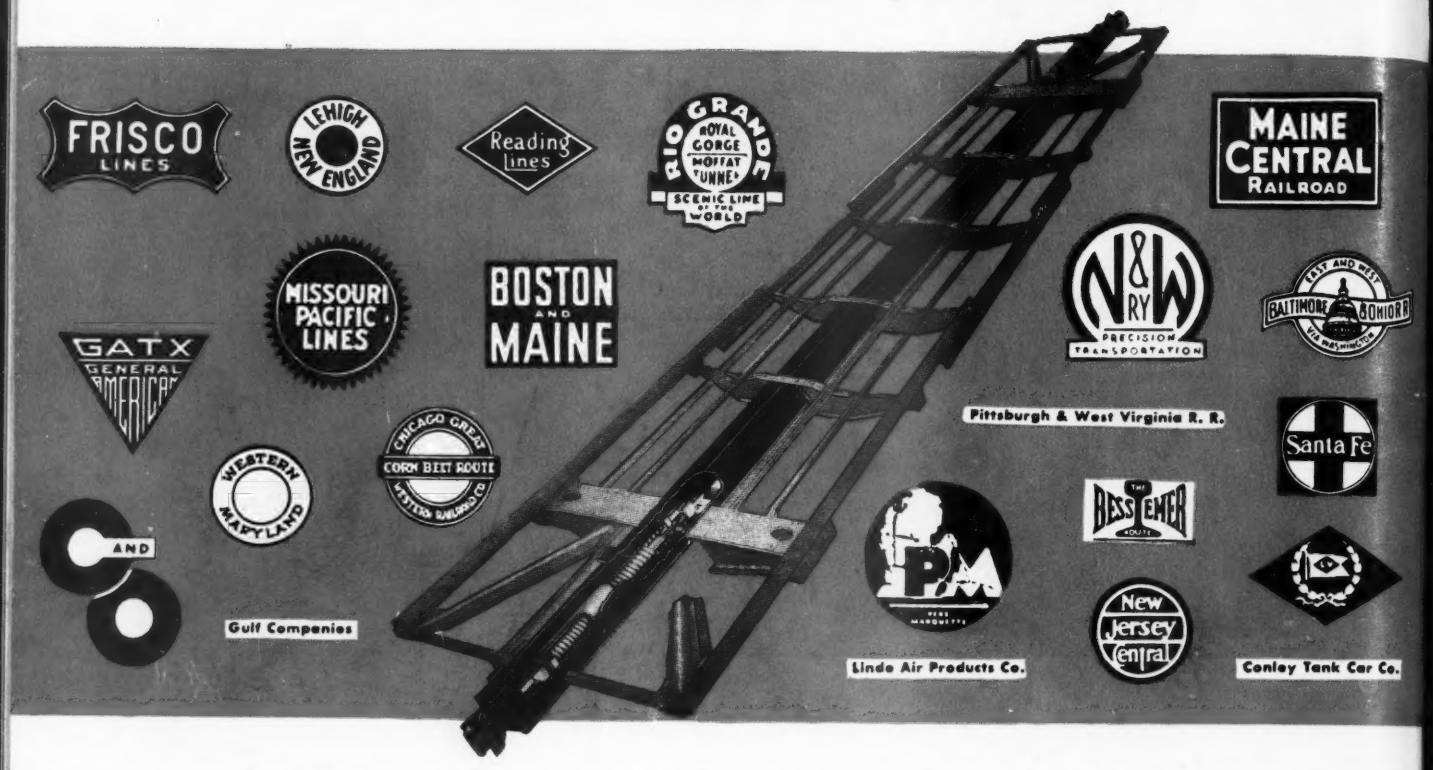


. . . and not one Duryea Cushion Gear has had to be replaced!
(other than through wreck conditions)

A smooth-runnin' story, if there ever was one! However, the elimination of draft gear lay-ups is only one of many exclusive Duryea features. Most of the others stem from the fact that THE DURYEA *Cushion* UNDERFRAME AFFORDS 100% SHOCKPROOF SHIPPING!

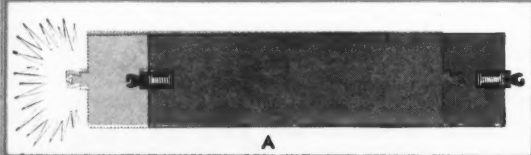
What this means to the safe arrival of vital Victory ladings cannot be overemphasized.

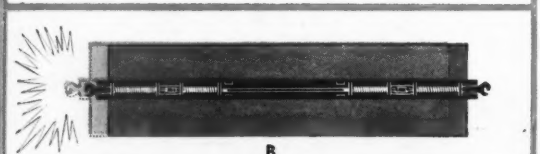
And when the Axis have been buried under an avalanche of American shipping, look for the Duryea Cushion Underframe to play an ever-increasing part in American transportation.

Here's what actually happens

. . . when two stationary freight cars, one with conventional draft gear and one with the Duryea Cushion Underframe, receive an impact equivalent to a 50-ton car, loaded to capacity, coupling at a speed of 4 miles per hour.

The "conventional car" (A) receives almost the entire impact force, due to the conventional draft gear "going solid",


A


B

and is shunted down the track. (If this were the end car of a train, it could not "ride with the blow", and punishment to both car and lading would be great.)

However, in the "Duryea car" (B), with the shock absorbed by the floating sills and cushion springs, both car body and lading *ride over* the impact and are comparatively undisturbed.

How the Duryea Cushion Underframe Contributes to Victory

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